

CAMPFIRES REKINDLED



By
George S. Kephart

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THE AUTHOR BESIDE ALLAGASH STREAM — 1919

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A Forester Recalls
Life in the Maine Woods
of the Twenties

by

George S. Kephart

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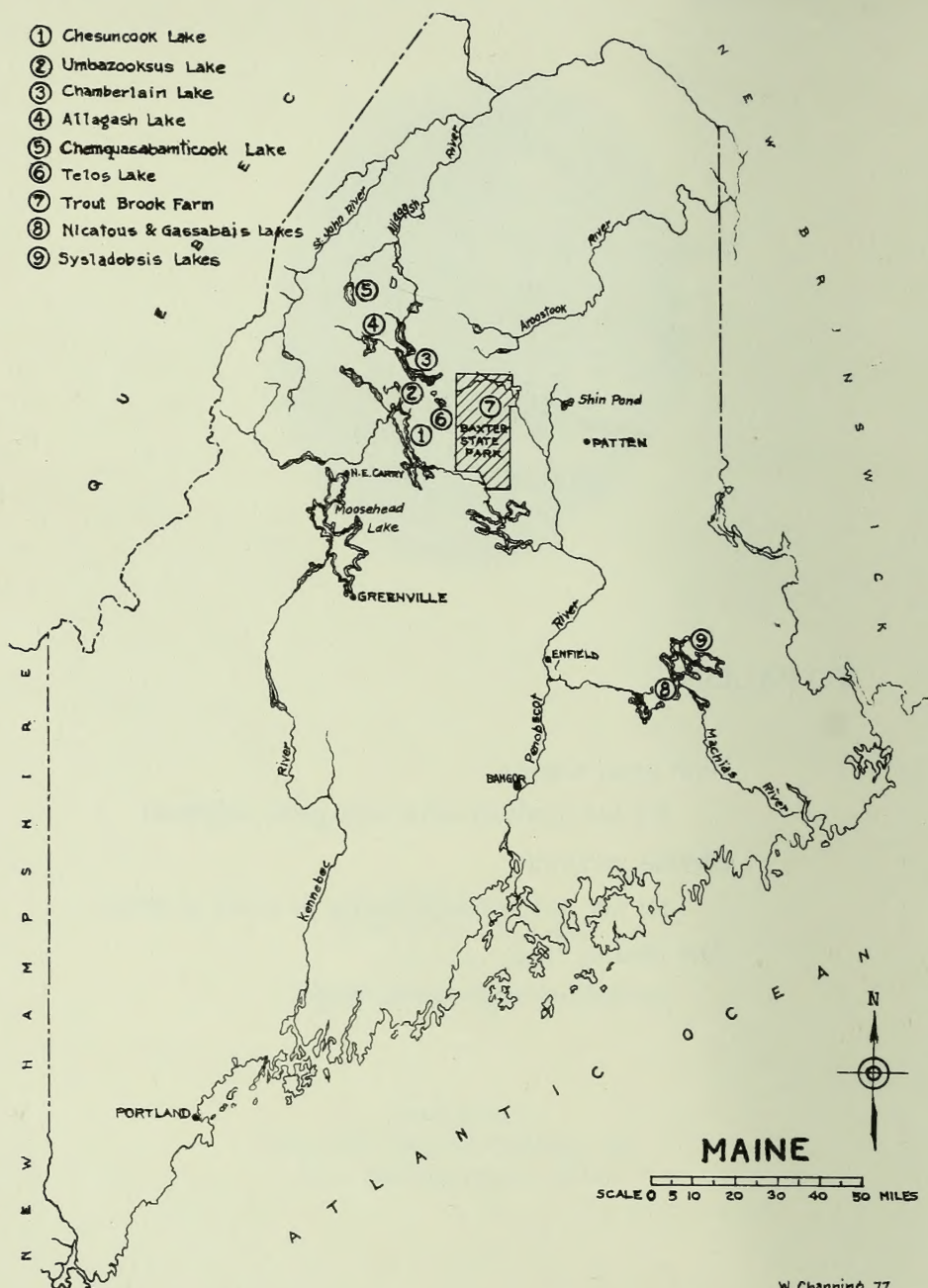
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TO PAULINE

*With great respect
for her common sense and good judgment
Eternal gratitude
for her courage and loyalty in times of stress
And abiding love
for reasons beyond counting*

- ① Chesuncook Lake
- ② Umbazooksus Lake
- ③ Chamberlain Lake
- ④ Allagash Lake
- ⑤ Chemunabamticook Lake
- ⑥ Telos Lake
- ⑦ Trout Brook Farm
- ⑧ Nictaus & Gassabais Lakes
- ⑨ Sysladobsis Lakes



W. Channing 77

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PREFACE

Some favorite recollections of youthful days take me back to the Maine woods of the 1920's. And high on this favored list is the memory of unbroken months at a time that I spent with a small party of timber cruisers camping along the upper reaches of the Allagash and Penobscot Rivers. It was the beginning of my life's work as a professional forester.

Each of the countless campfires that we kindled served its purpose and was then extinguished. No trace of them remains to suggest we ever passed that way. In memory, however, these fires are easily rekindled, and they recall to mind many incidents of life as it used to be in the Maine woods.

Ours was a more isolated and Spartan life than the camper of today will experience; for, inevitably, the passing years have wrought their changes. Most noticeable is the increasing ease with which an ever-increasing number of campers moves in and out of this vast region — an acceptable or regrettable fact of life, according to one's point of view.

There are logging operations throughout the forest today, as there have been in the northern Maine woods for nearly a century and a half, beginning in the 1830's. The scars of earlier logging have healed or are mending; so it is primarily the changing location of visible scars, rather than their presence, that merits comment.

Despite all changes, the basic appeal of this land is much as it was in the days of Thoreau. There is still the certain assurance that peace of mind and great uplift of spirit can be found in the Maine woods, if one will but seek them.

Perhaps the reader will find in the following pages some understanding of and feeling for the life patterns of the Maine woods a half-century and more ago. And perhaps this will lead to a greater appreciation of the wildwood values that have been preserved as a legacy for his present-day enjoyment.

Silver Spring, Maryland
1977

G. S. K.

1

WOODS WEATHER

The seasons change, the winds they shift and veer.

Sir William Watson

There was a time, which may still be with us, when rural folks of the northern states would bank their houses each Fall. Hay, sawdust, straw, or what have you was piled against the foundations to well above the sills, to keep drafts from seeping up through the floors. Storm windows and doors were secured in place as further protection against the winter winds.

Cynics used to say that Maine has only two seasons — Fourth of July and Bank Your House. There are, of course, the usual four seasons. But when I think of the Maine woods they assume special names — The Breakup, Fly Time, Fall, and Snow Time. Changes in season sometimes come overnight. More often there is a transition period as one season merges into the next.

It was during such a lull, between Snow Time and The Breakup of 1919, that I first ventured into the Maine woods. There was a feeling of change in the air. The blanket of snow, accumulated over many winter storms, still lay heavy on the land. But it was by then an old and somewhat soiled blanket. Winds had swept the branches clean of a snow frosting that had coated them throughout most of the winter, and they

stood out darkly against the whiter background, instead of merging into it.

The days grew imperceptibly longer, and the sun had a slight extra measure of warmth. Tree trunks absorbing this warmth melted the snow from around their bases to expose patches of bare earth. Bits of chaff on the soiled snow absorbed the warmth, too, melting little depressions for themselves into the formerly smooth surface. Occasionally an astonished insect would crawl out from beneath the sun-warmed bark and wander about stiffly in the still unfriendly world. The whole mass of snow began to soften and settle irregularly. By afternoon the thongs of our snowshoes would be wet and soft and stretched out of shape. Heavy snow loaded up on the shoes, and walking became most difficult.

One evening we returned to camp after walking all day through the wet snow. It froze overnight, and the next morning we walked easily on the ice-hard crust with snowshoes slung on our backs. By noon it had thawed again, and we were back to heavy shoeing. This was repeated for several days. Then there was no overnight freeze, and woods travel became next to impossible.

During these days we began to leave our mittens off a bit longer when we stopped to take notes, and our mackinaws stayed unbuttoned. The noontime fire became just a means of "boiling tea" and was no longer needed for warmth. It was also the time when sap poured out as we cut through the bark of hardwood trees to spot the path of our survey lines.

The real spring Breakup was often heralded by an all-day or all-night rain. Then the waterlogged snow would begin to disintegrate and each tiny brook would cascade its addition into the larger streams which, in turn, became clamorous with floodwaters. There was the swish of low-lying branches, buried all winter under the snow, as they were released from their burdens and sprang back to normal position. Water came up over the lake ice and made it no longer safe to walk on. Finally the ice broke up, and there was again the sound of

waves washing against the shore. Throughout the forest the stillness of winter gave way to the sounds of Nature's awakening.

Shortly after we reached our camp on Allagash Stream, on my first trip into the woods, the last patches of snow melted away and the floodwaters subsided. The Breakup was completed. Lakes and ponds, that had been so easy to cross on their bridges of ice, became obstacles to be detoured. Opening leaves turned each tree and shrub into a green curtain that obscured the view and drew the visible world closer around us. But the air was soft and warm, and life in the woods seemed very good to me.

On one of these days, after a night of rain, I was stone-hopping my way across Allagash Stream, at this point no more than a brook. In midstream I paused, partly to look ahead for the next stepping stone, but mostly to enjoy the picture of clean, fresh water tumbling down under an archway of new green. With mild annoyance I brushed aside a tiny fly that hovered around my face. Then, suddenly, a cloud of vicious little black flies was all around me. They probed into eyes, nose, and ears, and raised painful welts on all exposed surfaces as they slaked their thirst with my blood. Brushing them away became an act of flailing and futile desperation, and there was the same impulse to run that comes over one who blunders into a yellow jacket nest. In that instant the joy of life in the woods changed for me into the minor hell of Fly Time that continued well into September.

I had been forewarned, of course. Our gear included several kinds of fly dope, because Earl, Jim, and Mike of our survey party each had his pet formula. But one must have personal experience to understand how completely these insect pests can destroy the enjoyment of camp life.

The literature on camping is laced with tales of these pests. In Wallace's *Descriptive Guide to the Adirondacks*, published in the 1870's, a head net is listed as a required article of clothing:

This should be manufactured out of lawn or Swiss muslin and fine steel hoops, such as are put in hoop skirts. It should be provided with an elastic band with which to gather it around the neck.

Wallace gives no instructions for maneuvering through the woods with such a contraption. He does suggest that it would be especially helpful when sleeping. But how does one sleep in a steel-hooped head net? Wallace also gives seven different fly dope formulas, and says:

In addition to what has already been offered on the subject of "Insect Preparations," we present to notice "Dr. Vega Arango's South American Antidote" for Mosquito, Black Fly and "Punkey" bites. One drop of this wonderful specific applied to the part bitten by these detestable Insects, instantly neutralizes the effects of the poison, relieves the horrid vexatious stinging pain and removes the distressing inflammation which invariably follows, thereby provokingly disfiguring the face and body.

At the rate of one drop per bite, it would take a gallon of the Doctor's Antidote to care for one day's exposure to the "detestable Insects." This may be one reason why such a miraculous concoction has disappeared from the market.

Some forty years later my father devoted a whole chapter in one of his books to the subject of "Pests of the Woods." He spoke of the legions of fly dopes that had been advocated and gave recipes for about a dozen of them.

Each region has its own list of major villains. In Maine they include the black fly, punkey, mosquito, moose fly, deer fly, and others of lesser note. Each of them has its own season of greatest glory. Unfortunately, the seasons overlap.

People react differently to the fly problem. Some are more susceptible to attack than others. To some, each bite is no more than a passing annoyance, while for others the bites produce itching, welts, and open sores that persist for days. Some strong-minded individuals develop a disdainful disregard for the tormentors. Dedicated fishermen often return to camp at night covered with welts but blissfully happy because they have caught one little trout. Other people are driven from the woods in panic. The best I could ever accomplish was a mild immunity to the poisons and a stoic acceptance of the pests as an unavoidable evil of the woods.

I tried to rationalize the existence of these tormentors on the theory that "all things, both great and small," have a reason for being on this earth. When the mosquitoes were at their worst I would recall that they breed in stagnant water, where their larvae feed on decaying vegetable matter and, in turn, are fed upon by fish. When the deer flies were a plague, I would remind myself that they had once been maggots feeding on carrion and thus helping to keep the forest clean.

The only good word I can conjure up for the black flies and, to a lesser extent, for the punkies is that they observe working hours, like good union men. Black flies swarm in the daylight hours and go to bed at night. Punkies work the night shift, primarily, but with considerable overtime, and are apt to retire at dawn. In total, however, I discovered no good reason for the existence of these two pests. I have heard that black flies spend the early stages of their development in quick-water. Aside from this I know practically nothing of the life history of either critter, nor do I care to. Being ignorant of their saving graces, if any, I can empty the vials of my undiluted wrath upon them. If I should discover that they actually perform some useful function in the General Scheme of Things my wrath would have to be diluted by that discovery, and I could no longer consider them as complete and unmitigated villains. It is good for a man's equilibrium to have a few things that he can dislike without reservation, like black flies and punkies.

Perhaps some present-day Dr. Vega Arango has invented a fully effective fly dope. If so, he is to be blessed. But it won't change my opinion of black flies and punkies.

There was always a shining light of anticipation to help me through Fly Time. After Fly Time comes Fall, without doubt the best season of all in the Maine woods.

Sometime, probably in September, the plague of flies tapered off. We began to seek the sun's warmth at lunch time, instead of hiding from it, and we built the campfire a bit higher at night. There might be days in a row of overcast skies and cold, drenching rains. We began to calculate the days of work still to be done before cold weather really set in. For we

knew that when shell ice begins to form along lake shores, the end of canoeing weather is not far off.

The fall colors appeared, first on isolated hardwood trees, then in patches, and then a merging of them all until the countryside was engulfed in a sea of reds, oranges, and yellows. Individual conifers became exclamation points among the hardwoods, and groups of them became green islands in the sea of flaming color. You could stand all day in one spot and witness unbelievable variations of color, light, and shade as the sun ran its course across the sky.

For every year of your life you may witness the splendor of fall coloring in the eastern woodlands. And each year it will fill you with a sense of wonderment akin to awe. It will, at least, if you have the slightest feeling for the natural world in which we live.

The colors faded into browns, and the leaf fall began in earnest. It was a wonderful time of year to be in the woods, especially in years when there were long periods of bright-hazy days and brisk temperatures. Then the leaves built up on the ground loosely, until we waded through them halfway to our knees. It was poor weather for hunters because they could not move quietly, but the rest of us enjoyed life better when it was not threatened by stray bullets.

The green curtain of leaves that had restricted the view all summer dissolved as the leaves began to fall. A sense of distance returned as we looked far down the hardwood slopes.

On one Fall day I was shuffling through the dry leaves, actually making as much noise as I could, with the same pleasure that youngsters find in wading through piles of leaves on a neatly-raked lawn. Topping a minor rise on the undulating slope I came full upon a bear, perhaps fifty feet away, rooting for beechnuts at the foot of a large tree. We saw each other at the same instant. For a moment that typically seemed like minutes we stood frozen, but it was long enough for me to debate whether to shoot or move on. All I had was a revolver and a light ax, and I had heard that a wounded bear can be ugly. To my present regret I did shoot, and killed the

bear. There was a moment of excitement. Our camp fare was supplemented with bear meat, which was only tolerable. And I sent the hide in to be tanned; but it was not a "prime" skin for that purpose, so my "bar-skin rug" didn't last too long. Overall, I would remember that incident with greater pleasure if the bear's feast had not been interrupted so suddenly.

Fall is, indeed, my favorite time of year in the Maine woods. But even Eden had its serpent. The fall rains can be prolonged, drenching, and cold. The fall winds can be mean. They used to come upon us without the present-day fanfare of weather watches and feminine names for the heavier gales. But surely the high winds of some years were the remnants of gales that would rate some publicity today.

One Fall, during a spell of bad weather, we were camped in a stand of Norway pines on Gassabais Lake, in Hancock County. Prolonged rains had waterlogged the soil. Then the wind rose. As it increased in strength we heard a few trees crash some distance from camp; and from this opening in the forest canopy a lengthening swath of blowdown headed for our tents. We were not anxious to be buried, so we struck camp, loaded our canoes, and rode out the rest of the storm off the lee shore on the very unfriendly bosom of the lake. When the winds died down our campsite was a tangle of wind-thrown trees.

There comes a time of continuing chill in the air. Ice forms at night and is reluctant to melt under a sun that has lost its strength. There are angry sputterings of rain and wet snow that compact the fallen leaves until they are no longer crisp and rustly. Geese may be heard overhead on their southward flight, sometimes out of sight above the low-hanging clouds. It is the time to break camp and get out of the woods or to convert to wintertime operations. The first real snowstorm of the season, if heavy enough, may catch hunters by surprise, and some have perished.

This period of change, from Fall to Snow Time, spells discomfort in the woods. You can't keep dry, and when you're wet you're cold. The snow is too deep for walking, but not

deep enough for snowshoeing. Shell ice makes canoes useless, but the lakes cannot yet be crossed on the ice. Fortunately, this state of affairs does not last long, as a rule.

We were always glad when freezing weather preceded the heavy snows, because the swamps and wet spots were then frozen solid and stayed hard and safe beneath the insulating layer of snow. If snow came first, this same insulation kept these areas only half-frozen through most of the winter.

Heavy snowstorms cast their own spell upon the forest. As dark clouds drift in and the snowfall begins in earnest, no more than a dusky twilight filters down from the hidden sun. All wildlife is quick to seek shelter, where it quietly waits out the storm's progress. The ground, the underbrush, the tree branches, and even the windward sides of tree trunks are painted a virgin white by the falling snow and are drawn behind this obscuring veil until they merge, one into the other. The sense of perspective is partially destroyed.

The voices of wildlife are stilled, and the deepening snow absorbs other sounds until a strange, somehow disturbing hush descends upon the forest. At times there is the faint, restless sighing of an errant breeze high in the treetops, or a soft "kerlush" as an overburdened branch relieves itself of the snow mass that has weighed it down.

When the storm ends the hungry animals bestir themselves again and resume their always urgent quest for food. Then you become very much aware of their presence. Each track in the new snow suggests that its maker is close at hand, perhaps watching you from behind that bush just ahead, or barely out of sight and completely unaware of your near presence, or long gone if it has already become alarmed. Deer tracking in new snow is a mild adventure that many have experienced. If the deer discovers you first, the track pattern changes suddenly to long leaps or a quick-paced withdrawal. If you catch up without the deer's knowledge you can become a Peeping Tom on its activities. Then when it senses danger the normally graceful animal may freeze most ungracefully, with ears cocked at odd angles and legs straddle-braced as if ready to take off in all directions at once.

The tracks of little animals are numerous. When they are paralleled by those of a fox or a weasel you can follow along to where, according to the laws of nature, one life has been sacrificed to maintain that of its predator. Or the little tracks may end abruptly where the snow has been disturbed by the beat of wings.

Within a few days after a heavy storm some snow is windswept from branches and tree trunks. The spotless white ground cover becomes soiled with flakes of bark and other litterings that are continually filtering down onto the forest floor, and it is made ugly with yellow stains from porcupines feeding in the treetops. Animal tracks gradually lose their sharp outlines and no longer suggest the near presence of their makers. The veil of uniform whiteness is lifted.

Then there is another fall of snow to give the land a new carpet of white. It is Nature's way of cleaning house and sweeping the dirt under the rug.

In times of intense cold another form of stillness grips the forest. It often comes under blue-black skies and brilliant sun, or on bright moonlit nights. This stillness is broken by harsh, brittle sounds — the complaining squeal of sled runners; the sharp squeak of passing footsteps; the rifle-shot sounds as tree trunks suddenly split vertically under expanding pressure, when moisture within the trunk turns to ice.

This is the time when nature is most cruel, when it punishes most harshly those who would presume to ignore its laws of survival. There is, however, great uplift of spirit in meeting this challenge. Dressed properly, you go out into the hostile climate. The bitter air burns your nostrils and lungs, brings tears to your eyes, and clamps a hard vise around your chest. Then the body adjusts as you go about your chores, and there is the exhilaration of knowing that the elements have been mastered, for the moment at least.

But be on guard! Nose, ears, cheeks, fingers, and toes are vulnerable and easily frostbitten before you know it. Pause, even for a moment, and the cold is always there to soak through protective clothing. Overexertion brings you, suddenly and with little warning, to the point of fatigue, where

all defenses are weakened. Then the cold is quick to attack. Movements become fumbling, and thought processes are numbed.

Safely back in camp, when a blazing fire and hot tea have thawed you out, there is again the satisfaction that is known only to those who face odds and overcome them.

As the snow builds up from storm to storm and temperatures fall, the whole character of the forest changes. Snowshoeing at increasing distances above the ground, you find your point of view continually changing. Branches that were overhead in summer disappear under the snow, or snatch at feet, or hold out their impeding arms against your body. Tree trunks are curiously shortened, and you must remind yourself to include the portions hidden below the snow when measuring merchantable lengths. Timber cruisers measure tree diameters at the D.B.H. (diameter breast high), ordinarily a convenient four and one-half feet above ground level; now you must bend low or even dig in the snow to reach this point.

In the days when I knew the Maine woods, snowshoes were used almost exclusively for foot travel on the snow. I don't recall ever seeing skis in use, except as sports equipment. Almost every known shape of snowshoe was used, including homemade variations. They ran the gamut from occasional use of the Alaska-type shoes, with their long, narrow dimensions and exaggeratedly upswept toes, to those of almost circular shape. The most popular were the broad-oval types, including the stubbier beaver-tails; but for my work in timber cruising I preferred the bear paw shoes. They give less support than some others and are more "flippy" because they have no trailing tailpiece to steady them. But the same tailpiece is an impediment for the timber cruiser, who is continually making turnabouts as he goes from tree to tree in thick brush.

Snowshoe harnesses, or "hitches," were as varied as the ingenuity of man and the needs of the user could devise.

They ranged from the complicated store-bought assemblies of leather booties, straps, buckles, and rivets, to nothing more than a rawhide thong or strip of canvas. Each harness had its advantages and champions. Most of us who worked in the backcountry seemed to prefer the simpler types, because the inevitable repairs could then be made with nothing more than a rawhide thong.

Skiing and snowshoeing have little in common beyond the fact that each, in its own way, makes it easier to travel afoot over deep snow. The techniques of skiing take much practice to acquire, and the jargon of those who ski includes a long list of special terms relating to the complicated maneuvers involved. Snowshoeing is much simpler, and its jargon is confined essentially to one word — “floats” — the imprints left by the shoes as you trudge doggedly along, up hill and down hill.

If you would learn to snowshoe, begin on the bare ground. Borrow a pair of snowshoes that is already equipped with hitches that bind them to the feet. The type of hitch is of no consequence, for you will eventually select the one that best suits your fancy.

With the snowshoes attached, you will find that they are grotesque enlargements of your own feet, both in length and breadth. Lift one foot slightly. Your heel will come up off the snowshoe webbing, and the toe of the snowshoe itself will lift off the ground, while the tail remains earthbound. This occurs because the hitch keeps the ball of the foot in hinged contact with the snowshoe webbing at a point forward of the balance point of the shoe. There is a void in the webbing, immediately forward of the hinge point, so when the toe of the shoe lifts and the tail remains grounded, there is room for your own toe to dip below the tilted plane of the webbing.

Now begin to walk on the bare ground. The main difficulty will be to avoid stepping on your own now enlarged feet, with disastrous consequences. But in no time you can be slogging along at an awkward, shuffling pace — as long as

you maintain the required straddle. That is lesson number one — always walk straddle-legged when snowshoeing, to avoid stepping on your own enlarged feet.

Now you are ready to try out on the snow, which will bring up lesson number two — lift your feet! Your first step will plunge the shoe below the surface level of the untrod snow until snow compacted beneath the webbing is firm enough to support your weight. If you then try to shuffle ahead, as you did on the bare ground, the shoe's forward motion may begin while its toe is still below the surface level of the surrounding snow. Then the toe of the shoe will catch against the nearly vertical wall of the depression, just as you would trip against the riser on stairs if you failed to begin the step with enough vertical lift. The softer the snow, the deeper the depression made in it and, therefore, the greater vertical lift required before any forward movement of the foot is attempted.

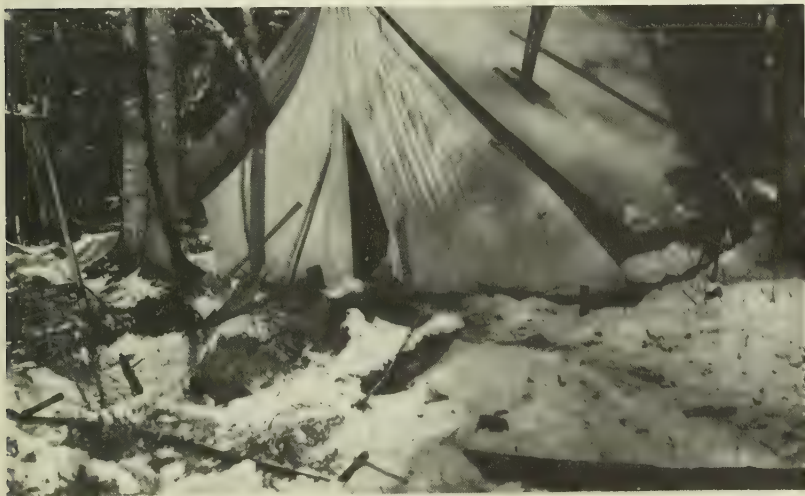
With these two lessons learned, you are well on your way to becoming a competent snowshoer. Of course, there are many important details to be learned, mostly concerned with maintaining balance if one of the shoes catches on a twig or other obstacle and fails to move forward as expected. Or the descending shoe may come against a branch or other object that tilts the shoe sideways, and in this case it may slice deep down into the snow instead of creating a compacted bearing surface. This can mire you as deeply in the snow as if you had tried to walk without snowshoes.

There will be other tricks of the trade still to be learned, such as working the enlarged feet through thickety growth protruding above the snow, regaining a standing position after losing your balance and falling flat, and walking on crusted snow — a tricky problem. But these and other details are conquered through experience, without the need of instruction by experts.

The two fundamental lessons, then, can be condensed into one admonition — simply learn to walk upstairs straddle-legged.

In Snow Time the camper must work harder than in other seasons at the basic task of keeping alive. Heavier clothing and bedding add to the bulk and weight of stuff that must be moved from camp to camp. It takes more time to establish camp, whether in tent or abandoned cabin. Much more firewood must be cut. Getting lost or "mislaid" in the woods, injuries, illness, or even overexertion assume more serious proportions when the snow is deep and the cold intense.

In one spell of winter weather we set up camp near the shore of a small pond. Using snowshoes for shovels, we cleared down to the bare ground a space slightly larger than our tent. To provide more headroom, the tent was erected on top of a low wall of pole-size logs. Snow was backfilled against the walls for insulation. Pole bunks were built to keep bedding off the ground, with fir boughs piled loosely beneath the bunks to keep out the drafts. A crude duckboard flooring was contrived because the ground within the tent quickly turned to mud. The tent fly was kept clean of snow, for otherwise the whole structure might have collapsed.



A WINTER TENT CAMP

All of this took time. But it is remarkable how quickly our little camp stove could warm up these snug quarters. And, unfortunately, how promptly the cold would return as the fire in the stove died down!

The consequences of becoming lost in the winter woods were impressed upon me in the winter of 1919. We were quartered at the time in a cabin of Murphy's abandoned logging camp, on Telos Lake. Our Bangor office apparently assumed there was a well-beaten path between our camp and Trout Brook Farm, some twenty-odd miles away. Apparently, too, they overlooked the fact that even if there had been such a path, it might have been obliterated by storms or confusingly crisscrossed by snowshoers working out of the pulpwood camps.

In any event, they hired a young man with no woods experience as an addition to our crew. He was dispatched to Trout Brook Farm, where he was to ask for directions to our camp. Of course we knew nothing of this arrangement. It is not surprising that the hardboiled lumberjacks of those days were not too kindly disposed towards this new forester coming into the woods. Nor, in the circumstances, is it surprising that they gave him no more than the casual directions that might have sufficed for one of their own.

So it was that late one afternoon a pathetic figure literally staggered into our cabin. He had lost his way, but by some good fortune had wandered onto a road that led him to Telos Dam. From there he saw the smoke of our camp and managed to reach us. He was wet, frost-bitten, and completely exhausted.

We bundled him into bed under a heap of blankets, forcing hot tea and hastily-contrived broth into him. He lay there all night, tossing with a bit of fever and a rapidly developing cold. By morning the cold had gone down on his lungs and, to our untutored eyes, it seemed like a touch of pneumonia. After a huddle we decided that a mustard plaster might help. We had all experienced that standard remedy of the times, but had only the foggiest notion of how to prepare it.

We knew that a mustard plaster is a mixture of flour and dry mustard, formed into a paste and applied in an envelope of thin cloth. But what proportions of flour and mustard? Since heroic measures were indicated, we decided to be liberal with the mustard.

The patient's chest was completely covered with the plaster. Blankets were drawn up closely under his chin, and he was told to call us if he needed anything. Then we went about our chores, with one or another checking on him from time to time. The warming plaster gave some relief. He dozed fitfully for a time and then fell into deep sleep.

We were proud of our nursing skill until he suddenly let out a cry of anguish and began to claw at the plaster. His chest was one big beautiful blister, agonizing to behold, let alone endure. We got him out of bed and into a chair, bare to the waist, because he couldn't lie down and even the pressure of a light shirt was unbearable.

This meant that the cabin had to be kept steaming hot for his protection. The rest of us stripped to essentials and suffered as a sort of punishment for our malpractice of rudimentary medicine. The patient did recover, fortunately, although he was weak for several days. So by good luck, rather than good judgment, we brought him through a crisis.

Looking back, I realize how lucky this young man was. If he had not, by pure accident, stumbled upon the road to Telos Lake Dam his name might well have been added to the long list of those who have lost their way in the Maine woods and disappeared completely.

The Breakup, Fly Time, Fall, and Snow Time. There are indeed four seasons in the Maine woods. The ever-recurring ritual of these changing seasons was always in mind as we planned our woods excursions, for to ignore them would have been folly.

2

THE UPPER ALLAGASH — 1919

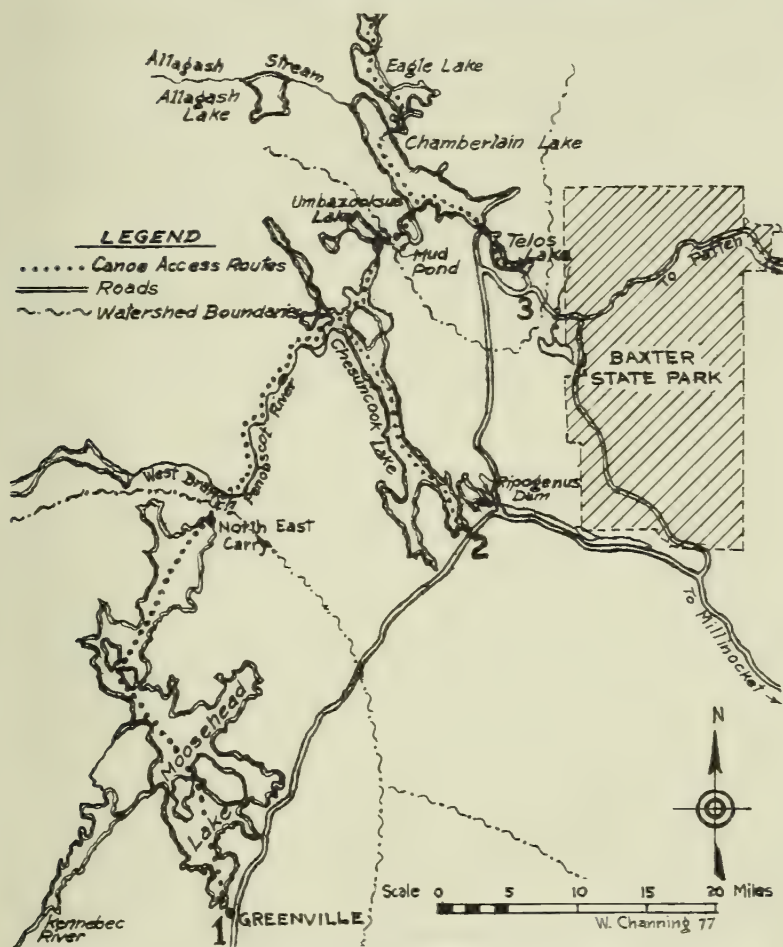
We asked him if he knew any good Indian who would like to go into the woods with us, that is, to the Allegash [sic] lakes.

Henry David Thoreau

Since the days of Thoreau, the Allagash River in northern Maine has been a magnet for those who love the deep woods. In Allagash country you travel by canoe and sleep in the open. And that is the way it will always be, for the Allagash is now a legally-designated Wilderness Waterway.

To reach the Allagash, in 1857, Thoreau journeyed overnight from Boston to Bangor by steamship. Two days by stagecoach out of Bangor brought him to Greenville, and to Moosehead Lake, which flows into the Kennebec River. From Greenville he paddled the long length of Moosehead Lake to North East Carry. There he portaged (carried is the expression used in Maine) across a low divide to the Penobscot River, crossed Chesuncook and Umbazooksus lakes, and carried again to Mud Pond and Chamberlain Lake, where he found himself for the first time in the Allagash River Basin. (Actually, the upper part of this river from its headwaters to Chamberlain Lake is called the Allagash Stream. The lower portion from Chamberlain Lake to where it joins the St. John River is called the Allagash River.)

CANOE ACCESS ROUTES TO UPPER ALLAGASH



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Approximate Dates	Access Point Numbers	Routes
Prior to 1920	1	From Greenville, up Moosehead Lake to North East Carry. Down West Branch Penobscot River to Chesuncook Lake. Across head of lake, up Umbazooksus Stream to Umbazooksus Lake. Across foot of lake to Mud Pond Carry. Across Mud Pond and downstream into Chamberlain Lake.
1920-1960	2	Greenville to foot of Chesuncook Lake by auto road. Up lake to join with Route 1.
1960	3	From Patten or Millinocket by auto roads through Baxter State Park, continuing by road to Telos Lake. Across Telos Lake and Round Pond into Chamberlain Lake, down lake to join with Routes 1 and 2.

Moosehead Lake continued to be the most practical approach to the Allagash Stream for more than sixty years, though a railroad eventually connected Greenville with the outside world, and motorboats replaced canoes on Moosehead Lake.¹

Then, around 1920, a road being constructed from Greenville to Ripogenus Dam gave access by autos to the foot of Chesuncook Lake, and it thereupon became the "port of entry" for travelers to the Allagash.

For still another forty years, however, Telos Lake was beyond reach of most Allagash travelers. If one had sufficient time, energy, and curiosity he might make a side trip — from Chamberlain Lake Dam up a long stretch of that lake, across Round Pond, to Telos Lake. Then he would turn back to the dam to resume his journey down the Allagash. But this side trip required an extra twenty-five miles of dead water paddling, often against stiff and treacherous winds.

The isolation of Telos Lake ended abruptly, about 1960, when an expanding network of logging truck roads reached out a finger to the lake. Now, each year, hordes of present-day voyageurs reach the lake by this road, their cars loaded down with camp gear and canoes. Here, where the semi-wilderness begins, they slip their canoes into Telos Lake to begin their ten-day journey on a modernized version of the traditional Allagash trip.

It was by this road that I returned to Telos in 1963, for the first time in more than forty years. Standing at the water's edge and seeing again the well-remembered shoreline, I finally realized that this formerly remote area is now but a short day's drive from Bangor. A plane came up over the horizon, circled the lake, and passed on — a sharp reminder that even the auto road has become a toilsome way of reaching into this hinterland of my memories.

An impatient seeker of the wilderness had camped by the lake the night before, leaving behind him the usual thoughtless litter of his kind. A state warden was removing this evi-

¹Steamboats may have been operating on Moosehead Lake when Thoreau made his trip, but he used a canoe.

dence, and I suggested to him that we must be close to the site of an old logging camp. "Sure," he said. "Murphy's camp was up on the bank right behind you. It's all rotted down now."

So, climbing the bank, through brambles and alders, I came upon the remains of one little cabin. The roof and floor had long since collapsed, and low mounds of rotten logs were all that remained to outline the once-sturdy walls. A rank growth of brush and saplings had overrun the place, both within and outside the confines of the cabin; so from this point in the thicket there was little evidence of the old camp clearing or of the other buildings that had encircled it. For here, as she always will, Nature was methodically healing her wounds and obliterating the evidence of Man's former presence.

For the moment I saw the camp again as it was when I first came to Telos on an April day in 1919. The camp buildings were all standing then — the men's room, the dingle (covered walkway) connecting it with the cookroom, the office, the filer's and teamsters' shack, the hovel (stable) and hay shed, the blacksmith shop, and other outbuildings. The ground was white with late-winter snow, except where it had melted in the clearing around which the buildings were clustered, revealing a crisscross of paths and a wagon road worn deep into the soft forest soil.

But the camp was abandoned even then. During the previous year Mr. Murphy and his pulpwood crew had completed logging the timber within reach of the camp and had moved on to build a new camp in a new cutting area. Thus Murphy's crew took its place in the continuing succession of loggers who had marched across the land from time to time, beginning in the 1830's when the first loggers came to this area. Thus, too, the men who built the truck road marked the advent of still another generation of loggers, following Murphy. They had come to cut the hardwoods (weed trees in the eyes of Murphy and his predecessors) and to harvest the spruce, fir, and pine that had since grown to merchantable size.

In my moment of recollection the camp was peopled again with the little group of us who had struggled to reach it on that spring day so long ago. There were Earl, Jim, Mike, Henry, and myself of our timber survey crew; and the Frog Catcher with his wife, their sub-teen daughter, their ten-year-old son, and their guitar. I saw, too, the hermit trapper who lived with his mongrel dog in a cabin nearby; and, of course, the porcupines that were already taking possession of the camp buildings.

For our party, the trip to Telos began in Bangor. The Lincoln Pulpwood Company, our employer, assigned us the chore of estimating timber volumes on two large blocks of its land holdings; the entire job would require at least a full year of field work. One of these blocks, around Telos Lake, could be reached immediately, and Murphy's camp would provide a good base of operations. The other block, along the headwaters of Allagash Stream, above Allagash Lake, was most easily accessible by canoe. We planned, therefore, to begin work on the Telos lands. When lakes and streams opened up with the spring thaws we would transfer operations to the Allagash lands. There we would remain until freeze-up time of



EARL SHAW, HENRY DeRUSHA, MIKE St. THOMAS



JIM CLARKSON ON TELOS LAKE WITH A SLED HE MADE

the following winter, when we would return to complete our work in the Telos Lake area.

Earl Shaw, in charge of our party, was a native of Maine, a recent graduate of the University of Maine's School of Forestry, and already an experienced timber cruiser. A tall, raw-boned Downeaster, he was a hard-driving chief of the party, yet a tolerant instructor for those of us who lacked field experience. He had another talent. On evenings by the campfire, when the day's work had gone particularly well, or especially badly, he would break forth in song in a harsh, nasal tenor. Always it was the Field Artillery Song, out of deference to his recent service in that branch during World War I.

Jim Clarkson was a man of little schooling, but he had a profound knowledge of the woods. He was the elder statesman of our group, being perhaps in his early forties at the time. He recognized and appreciated the skills we brought to the work at hand because of our better educations. He also had a reserved pride in his own contribution, as an experienced woodsman, to the end result. He was a genius at discovering the overgrown tree blazes and decayed corner posts

that gave evidence of earlier surveys; and his knowledge of woodcraft made our camp life much easier. I can hear him now as he worked around the camp, softly humming tunes that only he understood. Then we knew he was pleased with the way things were going. This mood could hold firm for several months of steady camp life. But eventually he would change to a time of brooding, which meant that he was due for a trip downriver. It was mutually understood that his life in town was his own. Within a few days his bankroll would be gone, and the office would receive a fumble-mouthed request by phone for an advance. Arrangements would be made for his return to the job at a precisely specified time, and a messenger would be dispatched with enough cash to carry him over until he left town. On one such occasion, with two hours to train time, he agreed he could get by on a twenty dollar advance " . . . if I'm real mean to my friends."

Mike St. Thomas was a true French-Canadian in his early thirties. Schooling and he had parted company in the lower grades, and he had worked in the woods ever since. He was a true optimist who never let the truth interfere with his accounts of exploits in town. All of his feminine conquests were beautiful " . . . with big brown eyes, just like a cow's."

Henry DeRusha's name revealed his French-Canadian background, although he was a native of Maine. At about eighteen years, Henry had the slim build that gave promise of developing into hard-muscled manhood. His was a volatile nature that flitted between exuberance and youthful gloom, the changes sometimes matching the moods of the weather and sometimes stemming from no apparent cause.

For me, a recent graduate of Cornell's School of Forestry, this assignment would be my initiation into camp life and the work of a professional forester.

I have long since lost track of these four men, except that I heard Jim Clarkson spent his declining years at Chamberlain Lake Dam, where he became a sort of grand old man to many Allagash campers.

Getting to Murphy's camp from Bangor involved some frustrations which need not be detailed here. However, it be-



HENRY'S NATURE WAS OFTEN EXUBERANT.

came a journey of five days — the first by train, then two by tote teams, and the last two on snowshoes. En route we joined forces with the Frog Catcher family, also headed for Murphy's to await the spring Breakup.

We never learned the Frog Catcher's original reason for coming into the woods with his family. But somewhere along the way he had heard of a swampy area teeming with frogs and had decided to go into the frog leg business. He was a short, stocky man with a heavy black beard and no other noteworthy physical characteristics — a self-effacing, taciturn individual. During the weeks we were thrown together, however, he accomplished what were, to me, minor miracles of woods survival.

If it is true that opposites attract, then this man and his wife were made for each other. Her life, past, present, and future, was an open book from which she would read aloud for all to hear. She was equally willing to discuss at length the lives, fortunes, and passing fancies of those around her or to converse on any other subject placed before her. Silence was a sin of which she was not guilty. A statuesque, handsome, and

proud woman, from whom hard work and do-without living had exacted their toll, she maintained strict protective custody over their daughter, aged about twelve years, and a more lenient control over their ten-year-old son.

When we first met this family, on the road to Murphy's camp, the wife and mother was obviously unhappy. She was well bundled up in a man's heavy mackinaw jacket, knit mittens, and the same type of leather-top rubbers we were all wearing. But between the rubbers and the mackinaw there was a zone of protest where she displayed an ankle-length dress such as a lady in town might wear while shopping. Over the dress and peeping below the mackinaw was a dainty embroidered tea apron. The reason for the apron remained a mystery to us, and we discussed it many times, even after we and the family had parted company several weeks later.

It was probably the mother's insistence, rather than the children's talent or inclination, that accounted for the guitar among their belongings. The children played and sang, with considerable lack of enthusiasm, only when she told them to, which was frequently. Their efforts were just that — efforts. Nevertheless, all of us in their captive audience enjoyed listening to them.

When we arrived at Murphy's the Frog Catcher family took over the filer-teamster shack, while we moved into the office. A quick check of the cookroom revealed ample food supplies of the non-freezing variety, stored there for later transfer to Murphy's new camp. Most of it was in good condition, although mice had worked into some of it.

Inventory work on the Telos lands was begun immediately and progressed well. But cold weather held on beyond expectations, and we became impatient to continue to our Allagash Stream objective.

During these days the Frog Catcher was busy in the blacksmith shop. He had nothing to work with but his ax and knife, and a few rusty tools that the blacksmith and wood butcher (carpenter) had left behind. But this did not daunt him. He brought together some odds and ends of loose boards from around the camp, split some planks from dead

cedars along the lake shore, and found some tar, caulking hemp, and a miscellany of nails, bolts, and screws. With these he built a broad-beamed rowboat, large enough for his family and their belongings. To me it was just one of his many examples of self-sufficiency.

Then came a night of heavy, warm rain, followed by balmy days. Suddenly it was late spring. Water appeared on top of the lake ice, and the ice began to break up. We helped the Frog Catcher carry his boat to the lake shore, where it was submerged for an overnight soaking to close the seams. The next day it was brought to the surface, some remaining leaks were caulked, and it rode on a reasonably even keel.

The following morning we helped the family load their belongings and themselves into the boat. The Frog Catcher manned his homemade oars and rowed away on the calm lake. Just in case disaster should call for some undefined action on our part, we watched until they disappeared into the narrows between Telos Lake and Round Pond.

And so we parted. Memory fails me in many details regarding this family. What word did we receive of them at Chamberlain Farm? Where did they go, and how? And did they ever find those frogs? I don't know and will always wonder, just as I still wonder about that embroidered apron.

We could see the only clearing in these parts, called the "Chamberlain Farm," with two or three log buildings close together, . . .

Henry David Thoreau July, 1857

A day or so after our neighbors departed, a motorboat came for us from Chamberlain Farm. As we pulled away from Murphy's camp and pointed for Round Pond, I heard the faint whisper of a voice that is known to all restless souls. Someone, long ago, expressed its persistent message in the simple words, "Something hidden — go and find it." Those who hear the voice most clearly become explorers and seek out the farthest reaches of earth and sky. Most of us are content with little explorations. We search for land that is new to

CHAMBERLAIN FARM



SUMMER — 1919



WINTER — 1919-1920

Towboat (right shoreline) is probably the SS Duggan. When this picture was taken it had been beached for several years. It was used, circa 1910, to tow booms of logs from Chamberlain Lake to Telos Lake Dam.

CHAMBERLAIN FARM PERSONNEL



Far left, Henry DeRusha; 3rd from left, Earl Shaw; and two unidentified.



A SHOW OF FORCE AT THE FARM

Far left, Mike St. Thomas; 3rd from left, Dave Hannah, Farm Manager; 5th from left, Jim Clarkson, with hat; others unidentified.

us and are not concerned that it may be familiar ground to many others. In this spirit of mild adventure, it seemed to me that the boat was taking us ever farther from civilization and ever deeper into the backcountry.

We crossed Round Pond, passed through a connecting channel, and came out into Chamberlain Lake. The scene was an unbroken expanse of forest, receding from shoreline to the horizon of low hills. Then, as a bit of a shock, Chamberlain Farm came into view, far ahead on the north shore. There it was, a symbol of civilization carved into the forest — a bit of tilled land, some open fields, and a cluster of frame buildings. Its equal could be found throughout the more remote and less affluent areas of northern New England. In that spring of 1919 Chamberlain Farm was already past the heyday of its existence, and it was finally abandoned some six or eight years later.

It is said that Eben S. Coe made the original clearing in 1846, as a depot camp to supply adjacent logging camps. That was a time of strife among loggers in the region. The Allagash waters, of which Chamberlain and Telos lakes are a part, flow naturally into the St. John River, and thence through Canada to the Bay of Fundy at St. John, New Brunswick. In those days the only way to get logs out of this area was to float them downstream on the spring floodwaters. Therefore, the market for saw logs from this vast forested area was initially restricted to the comparatively small number of sawmills along the lower reaches of the St. John.

But in the 1830's Bangor, Maine, at the head of tidewater on the Penobscot River, was becoming the lumber capital of this country. Seagoing vessels filled the river at Bangor, waiting to be loaded with lumber for shipment to virtually all points of the world. For miles upstream the river was lined with sawmills. Logs for these mills came down the Penobscot River, which reached far back beyond Mt. Katahdin to find its headwaters in wide expanses of forest separated only by low divides from the forest lands draining into the Allagash.

Loggers for the Bangor mills cast envious eyes over these low divides at the Allagash timber and schemed of ways to

acquire it. In 1840 one of these enterprising men built a dam at the outlet of Chamberlain Lake. It was high enough to raise the water level in both Chamberlain and Telos lakes to well above the level of the height of land at the head of Telos Lake which separates the Allagash River basin from that of the Penobscot. The waters of Allagash Stream were thus diverted into the Penobscot through a control dam built at the natural head of Telos Lake. As long as the two dams remained intact, and with the Allagash waters flowing into the Penobscot, all timber on the adjoining lands could be driven to the sawmills above Bangor.

The St. John River loggers reacted violently. The Chamberlain Dam was blown out at least once, and rebuilt. Each faction sabotaged the operations of the other by burning hay and destroying other camp supplies. Arguments and some violence continued between them for many years, and no doubt Chamberlain Farm absorbed much of this history as arguments raged and plots and counter-plots were discussed within its buildings.

We remained at the farm for a few days, to complete our outfitting and to wait out some bad weather. This interlude provided the minor thrills of eating meals prepared by a full-time cook and reading old magazines. During this time we also witnessed the stupendous feat of conversing over the telephone, which was the farm's only winter-time contact with the outside world, via Trout Brook Farm. The single wire of the ground-circuit system had not been broken during the winter. But its efficiency, rather meager at best, had been greatly reduced. In many places, wind-thrown trees and ice storms had torn the wire loose from its insulated moorings and buried it under the snow. In these circumstances voices were weak and static was at a high level. Getting messages through involved shouting, swearing, banging the phone, and repeating oneself endlessly. If one was familiar with the caller's voice and vocabulary and was reasonably sure of what he was probably trying to say, the message might be received with some success. Otherwise, both parties would eventually hang up, muttering, "What the hell was he trying to say?"

Then they would try again the next day on the reasonable assumption that the line might "clear up" for one reason or another. In the meantime, all hands would get into the act of trying to decode the message.

In drawing on the Farm's warehouse we encountered a minor setback, for it could not supply light-weight blankets. All summer, therefore, we had to use our heavy spreads, which left us the unhappy choice of either sweltering under them, or throwing them off to become full-length targets for the hordes of mosquitoes and punkies.

In other respects our camp gear, as supplemented from the warehouse, included the most sophisticated and efficient items of the time, however crude and cumbersome they might be by today's standards. The foundation, quite literally, was three eighteen-foot canvas canoes, without keels. Keeled canoes, I learned, are for use on lakes and ponds, where the keel helps to overcome slippage in windy weather. In contrast, slippage is often desired when navigating in quickwater. Our two Baker-type lean-to tents were of the recently developed "tanalite" material, far superior to the usual heavy canvas. The nested cookware was of medium-weight aluminum recently arrived on the market. The folding reflecting baker was carefully guarded against dents and scorching.

Our food supplies were much more limited in variety than those now available. Salt pork, some bacon, lard, flour, cream of tartar, baking soda, rice, dried beans, potatoes, dried fruit, coffee, tea, sugar. These, together with molasses, condiments, a little canned milk, some canned tomatoes, and candles, were the principal items. In addition, there was a sprinkling of surprise delicacies like cocoa, for special occasions. We each had a big canvas packsack. For some reason packboards, tumplines, and the like were not common in the Maine woods in those days, although Lucius Hubbard describes in some detail the makeup of a tumpline pack as used by his Indian guide in 1881. Later, I acquired an Adirondack-type pack basket and found it more to my liking than the canvas packs.

The point in giving this detail is to emphasize that our equipment was modern for the time. We were not interested in roughing it or in emulating the austere conditions that Thoreau had found acceptable in the 1850's¹ and that Hubbard had considered adequate in the 1880's. By the same token, many campers today would scorn the equipment we prized and the inconveniences that we accepted as a matter of course.

On the first morning of fair weather we loaded our canoes and shoved off from Chamberlain Farm. Jim and Henry manned one of the canoes, Mike and I another, and Earl was alone in the third with a lighter load. This was the beginning of my first experience in canoeing and camping, so the first few weeks were particularly exciting.

Mike, in the stern of our canoe, was a good instructor in the art of paddling, so we got along rather well. However, the water that splashed over my hand was a sharp reminder of the ice that had recently covered the lake. It was no time for an upset, so we skirted the north shore.

After four miles or so we passed Chamberlain Lake Dam, the lake's natural outlet, where the waters flow into Eagle Lake and thence into Churchill and all the other lakes and intervening streams that are a continuation of the Allagash canoe trip. The dam is located at the approximate site of the original dam which figured so prominently in the "Telos War" of the 1840's.

¹In one of his books, Thoreau provided a list of items to be included in "... a good outfit for one who wishes to make an excursion of twelve days into the Maine woods with a companion and one Indian, for the same purposes that I did." In addition to clothing, personal items, and some odds and ends, it included the following:

Tent, six by seven feet, and four feet high in the middle — veil, gloves, and insect wash; or a mosquito bar to cover all at night — pocket map and compass — ax, jackknife, fishlines and hooks — matches and soap — a large knife and iron spoon (for all), four-quart tin pail for kettle; two tin dippers, three tin plates, and a frying pan.

Soft hardbread, twenty-eight pounds; pork, sixteen pounds; sugar, twelve pounds; one pound black tea or three pounds coffee; one box or a pint of salt; one quart of Indian meal, to fry fish in; six lemons, to correct pork and warm water; two or three pounds of rice.

Some years later a lock replaced the original design. It was actually two dams, working like the locks in a canal to lift logs from the lower-level Eagle Lake into Chamberlain, thereby adding the forested lands around Eagle Lake to the source of supply for mills along the Penobscot.

Within another few miles we passed the Tramway where, in the early 1900's, there was developed another method of bringing logs from Eagle Lake to Chamberlain. An article by Lore Rogers in *The Northern Logger* (May 1966) gives an excellent description of the Tramway. It can be condensed and paraphrased as follows:

The Tramway was an endless steel cable (1½ inches in diameter and 6,000 feet long) which passed around a submerged pulley in Eagle Lake and around another pulley, above water, at Chamberlain Lake. Clamped to the cable at ten-foot intervals were heavy steel buttons that were engaged by sprockets on the drive wheel of a steam engine. Thus motion was imparted to the cable to make it revolve, like the fan belt of an auto. Trucks with flanged wheels (which ran on narrow-gauge railway tracks straddling the cable) and cradles to support the logs were spaced along the cable, between the steel buttons.

At Eagle Lake, men with pick poles guided a log onto each truck as it rose out of the water. Then the wheels of the trucks ran up the tracks as the cable, with its load of logs, moved to Chamberlain Lake. Here, the logs dumped automatically into the lake when the cable passed around the above-water pulley.

To prevent the cable from sagging and dragging on the return trip, there was a second railway, below the one used on the forward journey, on which the wheels ran, with the trucks upside down.

At Chamberlain Lake the logs were gathered into booms and towed by steamboat to Telos Lake Dam. Operating for about six years, the Tramway was a successful venture that supplied about one hundred million board feet of logs for the ever-hungry Penobscot mills.

Then, for several years after the Tramway was abandoned, the ponderous Lombard Log Haulers continued to bring long sled-train loads of logs out of the Eagle Lake drainage into Chamberlain. In 1919 we saw one of these steam locomotives, mounted on caterpillar tracks and with steering controlled by sled runners in front, abandoned in the woods after delivering its final load of logs.

Many years after my last trip into this country, a logging railroad was constructed, this time to haul pulpwood from lands of the Eagle Lake, and even the Churchill Lake basins, to a paper mill on the upper Penobscot.

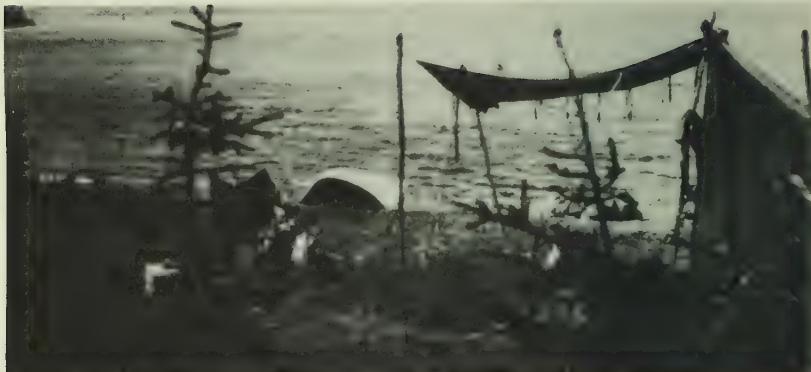
And now logging truck roads are penetrating even further, because the relatively low divides between watersheds no longer offer any significant obstacle to the lumbermen.

It is well-nigh impossible, today, to appreciate the extent to which even minor adverse grades once dictated the boundaries of timberlands available to any downriver mill. It is equally difficult to appreciate what personal and financial risks the early-day loggers assumed whenever they tried to cross those boundaries. Surely, this story is a tribute to American genius and courage.

* * * * *

Since our objective was farther upstream, we continued along the north shore of Chamberlain Lake a bit longer and then struck across a small bay to the inlet where Allagash Stream enters the lake. It is about seven miles upstream to Allagash Lake, and with the stream running at full spring flood, we had to carry around some falls and quickwater. Since the carry was another new experience for me, it was something more than just the dreary chore of trudging up the trail with all one could carry, only to deposit it at the head of the carry and return for other loads and the canoes. There were lessons to be learned in the care taken to combine hard and soft articles into individual packs that were reasonably comfortable.

By late afternoon we reached the shore of Allagash Lake with our first loads, and prepared camp. Pitching tents, gathering firewood, making beds, preparing supper, and all the details of orderly camp life were new to both Henry and me, so we were given the task of gathering material for the beds. Thus I learned that a bed of balsam boughs is much more than a pleasantly alliterative expression, and that the more you put into preparing it the more comfort you derive from it.



OUR FIRST TENT CAMP

Allagash Lake near head of Allagash-Chamberlain Lake Carry.

Balsam beds are probably an unknown quantity at public campsites today, for several reasons. Obviously, the supply of suitable material would become exhausted if the camp were used regularly, year after year. Then too, sleeping bags and other modern conveniences provide comfort with little effort. And, let's face it, the preparation of a decent bough bed takes time and is a bit messy for those who object to getting pitch on their hands.

Since it may become a lost art, a few words on our method of bed making may be of interest. The first step was to cut a long forked switch, generally from an alder bush. One branch of the fork was cut off to form a six-inch stub. The other was left at its full length of five or six feet. Densely branched fir (balsam) trees of Christmas-tree size were the best source of boughs. The fan-shaped terminal branches were snapped off between the fingers perhaps a foot from the tip, where the stem is of pencil thickness. The drooping growth habit of fir branches gives these terminal fans a cupped surface, slightly convex on the upper side. The fans were slipped onto the alder switch, one on top of the other and always with the convex side up. When it would hold no more fans, the switch was picked up by its small end and

slung over the shoulder. so that the long string of enmeshed boughs extended down your back like an Indian's long head-dress. The forked stub at the lower end of the switch kept the boughs from slipping off while the load was carried to the bed site. One such load would make a tolerable bed for one man. Two loads insured comfort, and three spelled luxury.

A log as long as the width of the bed and five or six inches in diameter was placed as a headboard, on reasonably smooth ground. Smaller logs placed along each side and at the foot were desirable, but not necessary. An intertwining mat of boughs was laid against the head log, butts stuck lightly into the earth, and with the convex side of the boughs resting on the log. The procedure was continued, layer upon layer, from head to foot of the bed. The boughs were set nearly vertical, but with a slight inclination towards the head. The end result was a closely-packed mattress of springy fir boughs eight inches or so deep. The more nearly upright the boughs were set, the deeper and more springy was the mattress; this also required a greater number of boughs. For a super bed, a second layer of boughs could be tucked in on top of the first, but this called for more boughs than we were ordinarily willing to gather.

Unfortunately, more boughs must be added at times if the bed is to be used for more than a few nights. And eventually it must be rebuilt completely. Nevertheless, a fir bed is a luxury worthy of the effort needed to acquire it. The clean smell of the boughs, their yielding comfort to accommodate your weary bones, the flickering campfire as it dies down into ashes — all these are part of the good wilderness life and contentment.

All the next day was spent on the carry. And when the canoes were finally brought up I felt we were really entering the backcountry — country that was beyond reach with any form of water transport other than the canoe.

The following morning we broke camp and set out along the north shore of the lake for several miles to the Allagash Stream inlet. Our objective was to find the east boundary line

of Township 8 Range 15, which was the first on our list of townships to be cruised during the summer. We assumed, correctly, that there would be conspicuous tree blazes, properly marked for identification, where the line crossed the stream.

As we proceeded, the increasing pitch of the stream and the flood stage of the water soon combined to produce a current too strong for our paddles. To my surprise, Mike exchanged the paddle for a long setting pole, stood up, and began to pole the canoe upstream. His action violated a rule to which I had innocently subscribed, that it is folly to stand up in a canoe. In the following months I learned of the kinship between an experienced man and his canoe that permits and encourages such departures from safe practices to which the inexperienced are bound. From that point I paddled a bit in favorable water and helped around obstacles when so directed by Mike. For the most part, however, I became an interested passenger with little to do but sit tight, drink in the scenery, and learn what I could by observation about the art of poling a canoe.

Having found the township line without difficulty, we continued upstream. We were now looking for a suitable campsite further within the township that could serve as a base of operations for a couple of weeks or so. Assuming reasonably good weather and working conditions, it would take over a month to complete the work on this township. We hoped to work out of no more than two main camps with, perhaps, a spike camp or two.

Another few miles upstream we found a gravel bar well above even the floodwaters, with a likely tent site on the adjoining slightly higher ground. Here we pitched our tents and set up camp, with cooking fireplace, open air latrine, and other little additions to comfort that would not be attempted at one-night stands.

And so we reached our point of beginning for a seven-month stint of timber estimating that took us from camp to camp in an area of low heights of land separating the headwaters of the Allagash from streams flowing directly into the upper reaches of the St. John River.

CAMP ON ALLAGASH STREAM ABOVE ALLAGASH LAKE,
SPRING — 1919



ARRIVING AT CAMPSITE



OUR CAMP

Even in those days it was not a "wilderness" by strict interpretation of that word, because all of the land had been logged at least once in the preceding one hundred years. But during the year 1919 there were no logging operations within our sight or hearing. In fact, most of the land had not been logged since the turn of the century, or earlier.

The nearest auto road was about seventy-five miles away, or more than two days' hard travel by foot, canoe, and motorboat. No planes flew overhead in those days. There were no radios to bring us word of the outside world. No motorboats or chain saws broke the silence. The only other campers we saw were the occasional ones we crossed paths with on our trips to Chamberlain Farm to replenish our supplies.

For days and often weeks at a time, the only human voices we heard were those of our own small party. The only sounds of man's civilization were those we made ourselves. The sounds of nature prevailed. In these most natural of surroundings, the "wilderness experience" was truly ours to enjoy, in far greater measure than can be found in many of today's designated wilderness areas.

As part of a rotation schedule I went "downriver" for the month of August to work up field notes and maps. Then I rejoined the field party, still working on the lands above Allagash Lake. This work was completed according to schedule, and by Christmas we were back at Murphy's camp to complete the project around Telos Lake.

3

THE TIMBER CRUISERS

By the work one knows the workman

Jean de la Fontaine

In the years since 1957, when Sputnik I made history as the first manmade object to orbit the earth, man has traveled to the moon and back; unmanned probes have reached deep into outer space; and earth satellites have become commonplace. Already various of these orbiting stations are busy transmitting back to us unbelievable detail regarding this earth on which we live, including heat-sensing photographs so precise as to distinguish between healthy trees in the forest and intermingled trees that have been weakened by the deadly bark beetles.

Can it be long, then, before we have satellites that can deliver to earth, on demand, an estimate of the volume, quality, and value of timber on a given tract of land?

When the day of satellite-delivered timber estimates arrives, it will be but a further step in the continuing improvement of timber estimating techniques. The methods used today, for example, are a far cry from those of the 1920's when I was wandering through the Maine woods. With modern techniques today's foresters can provide much better information regarding a forest property than we ever could. And they expend much less physical effort in obtaining their superior information.

It used to take us many days of hard travel in the woods and the measurement of great numbers of trees to obtain a map of a timbered area and an estimate of timber volumes on it. Today, much better maps and much greater information regarding timber volume and condition are obtained through aerial photography, supplemented by some on-the-ground checks of the photographs and the measurement of an amazingly small number of trees. The measurements are fed through computers to obtain information in great detail.

In my day, the nearest approach to aerial photography was a look-see over the country from atop a mountain or a tall tree. Our computers were adding machines, slide rules, and planimeters, sometimes augmented by the then newfangled calculators. We assumed that a good estimate of timber on a tract of land could be obtained only by measuring all the trees on an acceptable percentage of the total area. Furthermore, the area on which the trees were measured could not be in one solid block. It had to be spread uniformly over the entire tract of land, in narrow strips or in plots.

As an example, when estimating timber volumes on a six-mile-square township containing nearly twenty thousand acres, we might be satisfied with a $2\frac{1}{2}$ percent estimate by the line-plot method. In other words, we would measure every merchantable tree on about five hundred acres ($2\frac{1}{2}$ percent of twenty thousand acres), and these five hundred acres would be made up of two thousand separate quarter-acre plots distributed uniformly over the entire township.

Exterior boundary lines of the townships in which we were interested had been established at some earlier date, at which time the boundary lines were blazed (spotted as they say in Maine) and posts set at each corner. The corners were further identified by so-called "witness trees." Our first task, therefore, would be to find the appropriate corners and boundary lines. Very often the original corner posts had decayed, and tree blazes along the boundary lines had grown over, in which case we would renew them. We then measured the boundary lines with a surveyor's steel tape. Each quarter-mile point along the lines was identified by crayon markings on an adjacent tree blaze.

The chief of party was careful to identify the work done under his supervision by placing his "compass mark," or surveyor's mark, at each corner and at other strategic points. His compass mark, like a cattle brand, was a conventional design of his own contriving. A scribe was used to engrave the mark into posts and tree blazes. The scribe is a small hand tool, relatively simple in design but difficult to describe, with which shallow grooves can be cut (scribed) into wood surfaces. Both circles and uncomplicated straight or irregular lines can be formed. Scribes of various designs are still being manufactured for use in some woodcraft industries, so it seems unnecessary to attempt a description here. Designs of compass marks were held within the limits of what could be easily carved with such a tool.

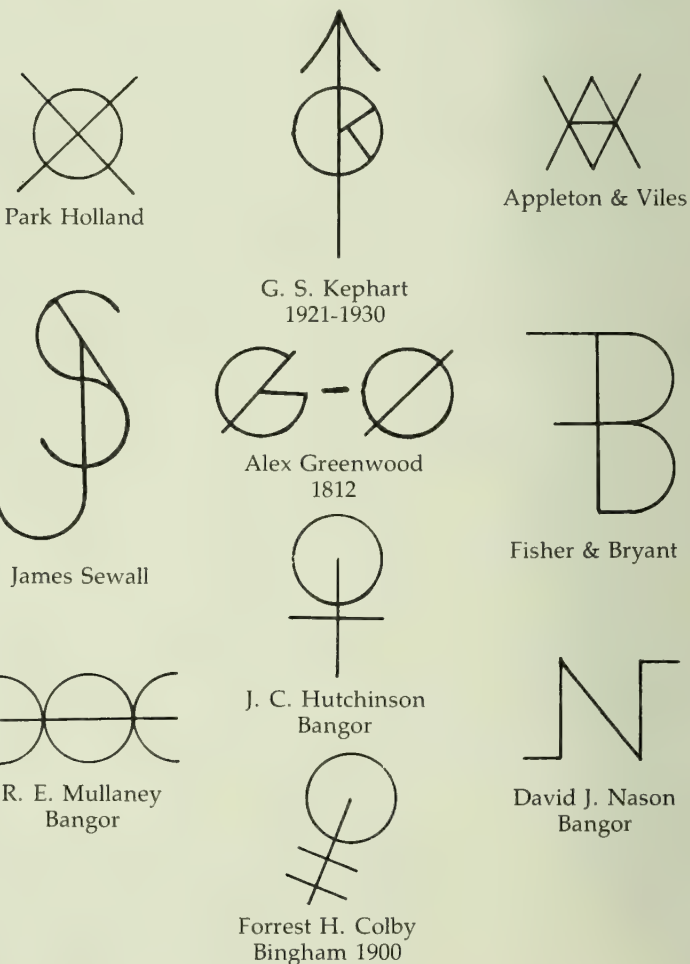
I understand that once it was required that these compass marks be registered at a public agency in Bangor. But in my time there was no such requirement, nor any agency where they could be registered voluntarily. Nevertheless, the marks of many surveyors and timber cruisers were well known among their brethren. In the early 1920's the Lincoln Pulpwood Company made up a chart showing about 120 marks, some of them being further identified by the approximate dates they were in use. The oldest shown were two used by Alex Greenwood in 1812. A compass mark that we encountered frequently was that of James Sewall, a forestry consultant and surveying firm of Old Town, Maine, which is still in business. My compass mark was developed after some experimenting. It was not unusual to find several compass marks on a corner post or witness tree, each one being further identified by a scribed mark of the year in which the work was done. Old scribings on living trees became completely grown over. When this overgrowth is chopped out, a mirror image of the compass mark appears as a raised design on the chip of wood that had overgrown it.

After renewing the boundary lines we subdivided the township into three rectangles, each approximately two miles by six miles, by running two base lines parallel to one set of boundary lines. If the base lines were to be run east-west, we would start at the two-mile point of one of the north-south

TIMBER SCRIBE AND COMPASS MARKS



To make compass marks such as those below, point A is pushed into tree; scribe is turned, and chisel B gouges circle or part of circle. Chisel C is used for freehand drawing of straight or irregular lines.



boundary lines and run the base line across the township to the two-mile point of the other north-south boundary. Then a second base line was run, parallel to the first, to connect the four-mile points of the north-south boundaries. These lines were run with a staff compass, brushed out, and the line trees spotted, so the line could be easily found during the subsequent cruising operations. They were then measured and the quarter-mile points identified in the same manner as the boundary lines. After this time-consuming chore was completed we were ready to begin the real work of timber estimating.

It should be noted that the intention was, as nearly as possible, to run the base lines parallel to the principal streams and heights of land. Then the cruise lines, which were run at right angles to the base lines, would cross these physiographic features, thereby giving a better distribution of quarter-acre plots through the different types of timber. As a result, the base lines might run north-south in one township and east-west in an adjoining one.

Starting from, say, the one-quarter-mile point on a base line, a two-man crew would set out for the corresponding one-quarter-mile point on the parallel boundary line, two miles away. Frequent readings of a hand compass were depended upon to keep us on course. Distances were measured by pacing. At each five-chain (330 foot) interval we would stop and use that point as the center of an imaginary circle having a fifty-nine-foot radius. A circle of that radius encloses an area of one-quarter acre. The diameter, height, condition, and species of every merchantable tree growing within the imaginary circle was entered in our notebook on specially printed forms. The process was repeated at each five-chain interval until the opposite base line or boundary line was reached. At the same time, the distance along the cruise line to each stream, pond, road, change in timber type, or other noteworthy object was recorded and sketches were made, to provide information from which the field map could be prepared. Sometimes the chief of the two-man party would run the compass, do the pacing, and enter the tree measurements

and mapping data in the notebook. The second man, under the chief's direction, would measure the trees with calipers, calling out the measurements to the chief, and would check the fifty-nine-foot radii to determine whether doubtful trees were within or outside the circle. If the second man was a competent compass and pacing man the roles might be reversed, for this gave the chief much more freedom to roam about while traveling between plots and an opportunity to examine more closely the trees being measured.

The hand compass and pacing techniques were crude tools, at best. So it was expected that the cruise line would be off, both in direction and measured distance, at the end of the two-mile trip. These errors, if within allowable limits, were noted so that compensating adjustments could be made when the field notes were worked up. Despite the obvious chances for error, however, an experienced cruiser would generally be off by relatively few paces, in distance, and sometimes would actually place his hand on the quarter-mile post for which he had been aiming, as he reached the end of the line. It is a craft that is gained only through experience, and I can vouch for the fact that gaining such experience can be most discouraging.

After checking in at the quarter-mile point for which we were aiming, we would walk to the next quarter-mile point and repeat the cruising process on a return trip to the base line from which we had started. If the terrain was of average difficulty, the timber stand of average density, and the line being cruised at an average distance from camp, the four-mile round trip represented a long day's work. Sometimes a combination of circumstances resulted in a relatively short working day. At other times we would be hard put to it to reach camp by dark. The forty-hour week and overtime were things unknown in our work.

Fundamentally, therefore, the line-plot cruise was a constantly repetitive process: measure the trees on a quarter-acre plot, move ahead five chains, measure the trees, move ahead, *ad nauseum*. To that extent it was akin to the line-production methods of a factory, where a man can spend his life putting a

particular nut on a particular bolt in a steady parade of identical pieces of machinery. In practice, however, the line-production boredom was strangely absent. Each step along the cruise line brought us in close contact with a new bit of the forest. Each measurement plot had some characteristic of its own that made it different from all others. Each obstacle along the line, be it a thicket, a blowdown, a beaver flowage or pond to be detoured, or a rough hill to be climbed, differed in one way or another from all other obstacles. The monotony of repetitive actions was overbalanced by the variety of surroundings in which the action was taken. It was hard work, with many times of discouragement, but there was always the firm conviction that it was a pretty good life after all and much to be preferred to a desk-bound existence in town.

We did, however, welcome the month-long return to town each time it became our turn to go "downriver" with the field notes, to work them up in the company office. Perhaps even Robin Hood's men were willing to endure the restraints of life in town at times, in order to enjoy room and board at the inn and to savor other conveniences of civilization.

Just as our field work of timber estimating was crude by today's standards, so was the office work of converting the field notes into a finished map and an estimate of timber volumes. From the field notes, we prepared a map of the area, on which the cruise lines and quarter-acre plots were shown. Boundary lines between timber types, as developed from the field notes, were entered as dotted lines. And, since there were countless little islands of intermingling types, the map took on the appearance of a patchwork quilt. The number of acres in each island of timber type was determined by laboriously tracing the type boundary lines with a planimeter.

Volume tables were available, showing the fractional number of cords (or the number of board feet) in trees of a given species, diameter, and merchantable height. From these tables we calculated the volume of all trees of a given species that had been tallied at a particular plot. These volumes, multiplied by four to give the volume per acre, were entered on the map at the appropriate plot points, and the average vol-

ume per acre for each island of timber type was calculated as the average per-acre volume of all plots falling within that island. The per-acre average, times the number of acres in the island, yielded the estimated volume of timber within the island, by species.

Further tabulations resulted in an estimate of the total volume of timber on the entire tract of land, broken down by species and timber types.

The involved series of computations was accomplished with the aid of slide rules, adding machines, and Friden or Monroe calculators (not to be confused with present-day calculators). The innumerable calculations and transcribings made the process wide open to mathematical and clerical errors, so frequent checks and crosschecks were necessary.

It was an irksome chore, and by the time it was completed, we were glad to return to the freedom of camp life.

4

A DAY IN THE HAY

He hath no leisure who useth it not

George Herbert

During my first year in the Maine woods the size of our camping parties varied from the original five to as many as ten men. All of us worked on the surveys, with no full-time cook or camp helper. The job of cooking meals was rotated daily, with those not acting as cook for the day providing firewood and water, checking the day's field notes, making up lunches for the following day, and, if time permitted, attending to personal needs such as emergency clothes repairs. It became a dreary business, and I vowed that if ever I were chief of party, I would insist upon a full-time cook whenever there were more than four men involved. It was a personal pledge that was fulfilled and proved its merit.

When camping, it was routine procedure to work every favorable day, including Sundays, since we knew that foul weather at irregular intervals would keep us in camp for a day in the hay. This was not a day of leisure on a hay mattress. Actually it was the time to catch up on the countless chores that had to be neglected when most of the daylight hours were spent away from camp on the survey lines.

A day in the hay gave time to work up an extra batch of cake and other cooked items for future lunches. This was

done despite the difficulty of maintaining good cooking heat at the open fire in a rainstorm, and of protecting the tin of cake batter while carrying it through the rain and getting it into the reflecting baker. If we were established in the decrepit cabin of an old logging camp, the cooking might be done indoors, with the baker hung on the outside of the little camp stove. This kept operations out of the rain, and time saved in the culinary department might be used to patch leaks in the roof or to make a more thorough cleanout of leavings from the former porcupine tenants.

Kitchen ranges with which I had been familiar at home were of the old-fashioned kind with no window in the oven door. So it was a novelty to watch proceedings in the reflecting baker as a soggy mass of dough began to swell, puff out, and brown until it became, with luck, a pan of biscuits or a delicious cake. Actually, the biscuits generally turned out rather well, provided you measured the cream of tartar and the soda carefully. Baking powder was rarely used, even in town. Restaurant menus listed cream of tartar biscuits, rather than baking powder biscuits. Careful proportioning of these ingredients is necessary, however, because too much soda gives the biscuits a jaundiced yellow color and a soapy flavor, while too much cream of tartar has less effect upon color, but the sourish taste can be pretty awful.

Our gingerbread efforts ranged from delicious, by our standards, to passable. Cakes were always a success because we demanded so little of them. If they were sweet enough and would hold together in the lunch bag, no one complained very much, even if they came out of the baking process almost as flat as the batter from which they started.

One of my chocolate cakes is recalled with particular pride. It was produced in a reflecting baker hung on the side of a camp stove. About halfway through the baking I found the cake rising more rapidly on one side than on the other. So I picked up the reflector to reverse the pan within it. The pan went crashing to the floor, fortunately right side up. Back it went into the reflector, properly reversed, a little more cooking, and the bake-off was completed. It was a most excellent

cake. Granted, it was a little lopsided, but it had a graduated texture that provided everything from chocolate brownies on the low side to an almost light cake on the high side, all in one slice. In view of this factual evidence I have become impatient with ladies who go into a tizzy of frustration if you so much as breathe hard while they have a cake in the oven.

Through the nostalgic haze of memory it seems that we always ate well. Every meal was a good one. But common sense dictates otherwise. Our variety of foodstuffs was very limited, we were not experienced cooks, cooking facilities were not of the best, and cooking was but a necessary incident in our workaday life. So, in all candor, it must be assumed that the food tasted good only because we were young, with stout stomachs, and were living a strenuous life in the open that kept us forever hungry.

A top-priority item for days in the hay was to recheck the field notes and bring the field map up to date. For protection, the map was kept in a metal cylinder. We carried with us a small bread board, used for cutting out biscuits and other cooking purposes, which also doubled for a drawing board. The map was plotted from the field notes and, with the notes, was later used by the company cartographer in the downriver office to prepare a finished map. It was essential that the field map be kept current, to spot any voids or errors in the field work before breaking camp.

We also liked to check our map against published maps of the region, primarily Hubbard's Map of Northern Maine,¹ which was almost a bible map at the time. U. S. Geological Survey maps for the region were not yet published. The winter that we cruised the township around Telos Lake we plotted a small pond on our map that was also shown, but without name, on Hubbard's map. This led to a conference, for we felt that this body of water should not remain a nameless waif on the face of the earth. We noted that Telos Lake, Coffalos Pond, and the nameless orphan were within a small radius of each other. Pure logic dictated that the unnamed

¹Lucius Hubbard, "Map of Northern Maine — Specially adapted to the uses of Lumbermen and Sportsmen" (1899).

should become Cocolos Pond, thus rounding out a tribute to a triumvirate of popular beverages. Cocolos Pond was inscribed on our field map and, I believe, on the finished masterpiece of the downriver cartographer. We were satisfied that we had made our contribution to posterity.

So I am saddened to find that the Geological Survey map developed from field surveys of 1957 has degraded our child with the name, "Little Coffeelos Pond," and has also departed from Hubbard's spelling of the larger pond.

The Government surveyors are partially forgiven, however, because their map shows a trail still leading from Telos Lake Dam to the shore of the larger Coffeelos (or Coffalos) Pond. This may be the same trail that we traveled many times in the winter of 1919, and it recalls two events. That winter we had set up a miserable tent camp along the trail near Coffalos, for a couple of weeks' work. Bill Hill, the company's chief forester at the time, decided to come out from town to see how the work was going. While he was traveling along the trail, his snowshoe released a fir bough that had been weighed down with snow. It swooshed into the air, brushing off his hat — a familiar experience for snowshoers. It also brushed off his eyeglasses, and he spent a fruitless half-hour groping for them in the snow. The next day we all joined in the search, but with no luck. Some months later we were walking past the same spot when something glittered in the sun. Bill's spectacles were hanging high overhead on the branch that had brushed them from his face.

If this is the same trail that we used, it was originally marked out for a good reason. Where you reached trail's end, on the shore of Coffalos Pond, you would find a little raft of dead cedars bound together with haywire, with a stone anchor aboard at the end of a haywire anchor chain. There would also be a setting pole. The initiated would pole the raft out some twenty feet or more from shore and anchor over a spring that came up in the floor of the pond. There, if you knew how, you could catch trout of rather prodigious size for the Allagash country. I know, because four of us made that expedition on one "day in the hay." Four men were almost

too much for the little raft, but it didn't quite sink. The other three began to get nibbles quite promptly and brought in some fine trout. But no trout, or sucker, or minnow approached my hook. After a half-hour I decided to quit and yanked up my line in disgust, only to jig a big trout by his belly. Of course, the boys said the pond was just so full of trout that I couldn't get my hook out of water without snagging one. It seems I'm just not a fisherman, although the fellows told me later that the only trouble was that I had forgotten to spit on the bait for luck.

On days in the hay we would also make repairs to clothing and equipment, and we might even shave and wash some clothes. If time permitted, equipment repairs might include fashioning an ax handle with the help of a crooked knife.

Maine is the only place where I have seen crooked knives, but it seems they must have been more widely used, because they are so practical. Thoreau saw one being used by an Indian near Moosehead Lake in 1853:

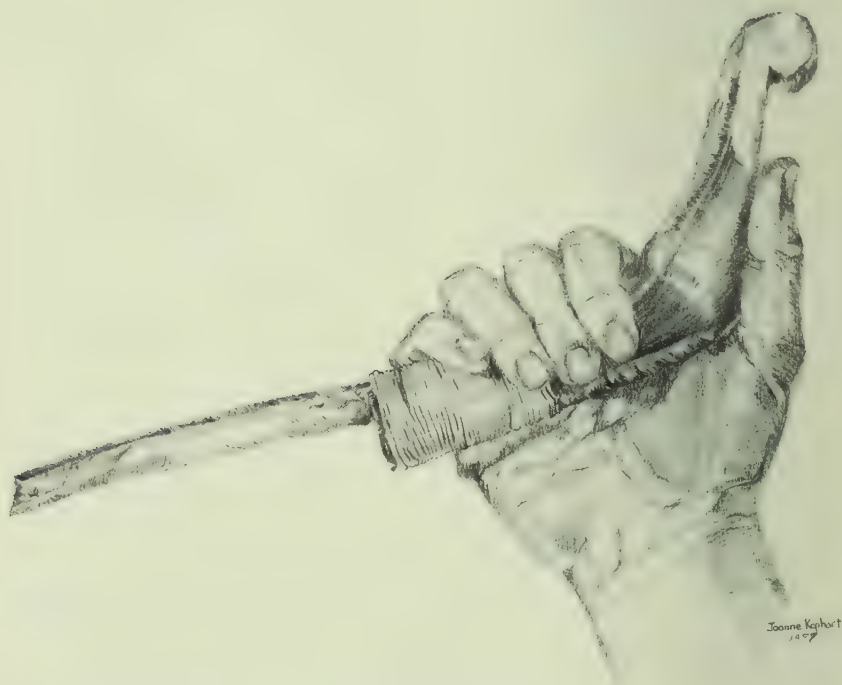
...Tahmunt was making a cross-bar for his canoe with a singularly shaped knife, such as I have since seen other Indians using. The blade was thin, about three quarters of an inch wide, and eight or nine inches long, but curved out of its plane into a hook, which he said made it more convenient to shave with. As the Indians very far north and northwest use the same kind of knife, I suspect that it was made according to an aboriginal pattern, though some white artisans may use a similar one.

Crooked knives were not factory made. Each one was separately fashioned, often by the local blacksmith, so there was uniformity only in the basic design. In essence, a crooked knife is a one-handed drawknife, or spokeshave, used for handcrafting all manner of small wooden items such as ax handles, snowshoe frames, bucksaw frames, etc. It has a narrow, curved blade set in a handle resembling a dog-leg. When you grasp it palm up, your little finger is close to the blade, with the cutting edge toward you. Your thumb rests on the flat bearing surface of the dog-leg.

My crooked knife, which is not of particularly good design, was made by a logging camp blacksmith, using a tine

from a horse rake for the blade. Soft copper wire, closely wound, binds the blade and its maple handle together. The cutting edge of the blade is about four inches and the overall length of blade and handle about ten inches. My knife is unornamented, but many a handle displayed the woodcarving skill of its owner, who considered his knife a prized possession.

When using a crooked knife, the workman grasps the piece of wood being shaped near the farther end with his left hand. The near end is supported against the body or rested on the knee. The knife, in the right hand, is then worked like a drawknife, to cut shavings from the wood and work it into shape. It can be a dangerous tool if carelessly handled, for the razor-sharp blade can slit your wrist or become a blunt-nosed dagger.



A CROOKED KNIFE

Maple and ironwood were considered good ax-handle material, although some claimed that ironwood handles were cold to use in winter. And ironwood trees of sufficient size were not plentiful. Hickory was not found in northern Maine, and neither oak nor ash was plentiful.

The first step in making an ax handle was to find a sapling of the desired species, perhaps eight inches in diameter, that would yield a straight, close-grained and knot-free chunk of adequate proportions. The sapling was felled, and the best handle-length portion of the trunk was taken. This was split lengthwise, through the heart, into four or more pieces. Each split piece, therefore, had a wedge-shaped cross section, like a cut of pie, with the bark corresponding to the outer edge of the pie.

The best of the split sticks was then selected. With an ax the curved (bark) surface was flattened, by hewing and splitting, down to a point where the flattened surface was slightly broader than the profile of the handle to be made. The profile was sketched on this flattened surface, or a spare handle was used as a pattern to trace the profile.

Then the inner or heartwood portion of the stick was split and hewed parallel to the previously flattened surface, to produce a rough rectangular cross section, slightly thicker than the maximum thickness of the handle to be made. More hewing brought the stick to a rough image of the handle.

From that point the crooked knife was used to complete the job. The wood, being green, was much easier to work than it would become after seasoning. A bit of broken window pane might be used to scrape the handle smooth, although little of this was required if the crooked knife work was well done. Then a nail was driven lightly into one end of the handle, a string attached, and the handle hung up to dry.

As in all woodworking, the real craftsman revealed his skill by the speed with which he worked and the quality of the end result. I still have my first crude attempt at making a hatchet handle, and it is evidence that craftsmanship is acquired only through much practice.

Clothes took a real beating as we barged our way through brush, brambles, and swamps on the survey lines. And since we had to pack everything on our backs or by canoe from camp to camp, we never carried much of a reserve supply of clothes. So it was not long until most of us, with little tailoring talent, began to look like neglected scarecrows. We were more particular about footwear. Leathertop rubbers were almost a standard for use during fall rains and spring thaws. They required little attention beyond regular applications of grease to the tops. Many of us continued to use them through the winter, despite the fact that they are much colder than elkskin pacs. The rubber soles were easy on snowshoe webbing. They also gave the feet some protection from the pinching and binding of snowshoe harness, whereas the soft pacs gave no such protection. Leather shoes, for summer wear, were usually of moccasin design, because when their seams opened up they could be more easily repaired with wax thread and sewing awl.

This may be a good time to vent my long-smoldering resentment against "the immaculate ones." After camping out for a few weeks most men show the effects of hard wear on clothing and person. Torn shirts, patched britches, and scraggly hair create tatterdemalions out of normally decent-appearing individuals. Almost invariably, in my experience, however, there will be one member of the crew who always appears spruce and neat. He works as hard and accomplishes as much as any other man. Careful examination confirms that his clothes are also tattered and frayed. But somehow he always looks as if the bandbox from which he first stepped is still close at hand.

My resentment on this point reached a climax many years later, on the Klamath Indian Reservation in Oregon. We had been fighting a forest fire for more than a week, with several hundred men on the fire line. Everyone was tired, sweaty, and grimy. Yet whenever I came upon Rollo on the fire line he stood out from the crowd. The sooty streaks on his face just happened to be where they added interest to his expression. His torn pants gave a devil-may-care fillip to his costume. And

his stubble of beard bestowed a heroic appearance upon him. He was a symbol of manly vigor — a veritable Robin Hood.

And I looked like a tramp. It was only when you looked closely that you noticed the fatigue around Rollo's eyes and the grim set to his mouth which said that he was carrying his full share of the burden.

I admire such people to the point of bitter envy for, give me but an hour of working in the garden and I have to hide when neighbors come to call.

Days in the hay were also used to scout for the next campsite and to pack in supplies from the nearest depot camp. The supply depots were often twenty miles or so from our camp, so it would take two days for the round trip. Supply trips were also a chance to pick up mail, along with local gossip and news of the outside world.

The following excerpts from a diary that I kept, for a brief time only, reveal the process of getting from Bangor to our camp in the Allagash Stream country. Although a heavy pack is mentioned only for the first day's travel, it was carried the whole distance.

Sept. 2, 1919: Left Bangor with Mr. Shepard after a month downriver . . . Had lunch at Shin Pond & then hiked 16½ miles to Deep Cove on Grand Lake, with heavy pack. Motorboat to Trout Brook Farm and spent the night there.

Sept. 3: Trout Brook Farm to Chamberlain Farm with Dave Hannah, Bill Eggleston & two others. Rained all day. About nine miles by canoe, the same afoot, & twelve by motorboat. Saw my first moose — a cow — on Webster Brook. Stayed at Chamberlain Farm.

Sept. 4: To the Tramway with Fred Lancaster, the Chief Fire Warden, for supper and night.

Sept. 5: Left Tramway at 6:40 for Crescent Pond in T9 R15, going through T9 R14. Had never been that way, didn't know the roads, but knew it wasn't confusing. Followed old log hauler roads, sometimes with aid of rough sketch and sometimes by guess. Arrived at Charlie Pratt's wangan on Crescent Pond at 3:00 P.M. About 20-22 miles. . . [Wangan, or wanigan, has many definitions. In this case it meant a temporary storage for our supplies.]

Sept. 6: Started for Earl Shaw's wangan in rain. Met him coming out to Charlie's with Woodall, a Georgia fellow, and Henry De-Rusha. . . . In afternoon went back with Earl, whose wangan is 8 miles away near 3-mile point of Base Line #2. Good site, but we have to lug water more than an eighth of a mile — that's too far, but there's no other campsite in the swamp.

.....

Sept. 11: Rain all day — no work. Did odd jobs around camp and loafed. Jim Clarkson varied the monotony by making a bow and arrow. Nearly got a partridge with it. My turn to get breakfast tomorrow.

Sept. 12: More rain — hard, too.

Sept. 13: Worked for a change — good day. . . . Ate lunch on Chemquasabamticook Lake. [We had all looked forward to seeing this lake, for no other reason than its awkwardly long name. Actually, it wasn't much, and we felt it deserved nothing more than the other name, Ross Lake, by which it was sometimes known.]

Sept. 14: Earl, Mike, and I went to Morrison's camp after supplies — three miles along Base Line #2 and five miles on old tote road. All afternoon to come back. [Morrison's camp was abandoned at the time, but we had packed in supplies to that point.]

Later entries cover another trip to Chamberlain Farm:

Sept. 27: Broke camp today. Took supplies cross country through the woods to Crescent Pond, about five miles. Left supplies at Crescent Pond & went on to T9 R14 Depot Camp — about 10 miles. Stayed overnight there. The Depot Camps are abandoned now. Were in operation when they used log haulers in this town — in 1912?

Sept. 28: To Chamberlain Farm.

Sept. 29: . . . We had to hang up at Chamberlain Farm. No mail. Jim Hughes is on his way in with it.

Sept. 30: Blowing hard today, so we stayed at Chamberlain in A.M. In P.M., Charlie, Jim, and I started along the shore — 4 miles — to Locks Dam & about the same to the Tramway. Then 8 miles along Eagle Lake & Russell Brook to T9 R14. Near the Tramway we met a Mr. Robinson and his guide, Bert McKenna (?) When we told them that Brown and another game warden

were just across the lake they made time towards their camp. They said they had a "partridge" hung up.

Oct. 1: Open season on deer and partridge begins today. Glad we're back where the "sports" aren't too thick. We three came from T9 R14 Depot camp to Pomeroy's old camp on 4th Russell. Then round trip to Crescent for some of the wangan.

On these trips to pack in supplies we infrequently met people who were vacationing in the woods. All vacationers, whether tenting or staying at vacation camps, were called "sports." The camps that served them were "sporting camps." The typical sporting camp was a cluster of log cabin sleeping quarters for the guests, with a larger cabin that served as lounge, dining room, and kitchen. The camps were located at scenic points on ponds and lakes and sometimes were easily accessible. More often they were rather far back, where access was only by motorboat or canoe. Sometimes the guest cabins had running water and even crude toilet facilities. More often there were only wash basins and water pitchers, outside conveniences, kerosene lights, and Franklin stoves. But they were very clean and comfortable, the meals were excellent, and the guests congenial. The sporting camps did not, however, appeal to the summer resort crowd.

Nor did they appeal particularly to that other class of sports, like the Allagash travelers, who found their pleasure in tenting out. These people were generally accompanied by a guide who did most of the heavy work, such as establishing camp, cutting firewood, cooking, and the more arduous paddling. The guides were also storehouses of information on woods lore. A good guide, then, was much more than a servant. He was a congenial companion.

Woe to the unfortunate who did not understand this role of the guide as an employee-friend. I well remember one poor fellow, too obviously from the most urban of urban surroundings, who camped near us with his guide one evening. He was completely disillusioned, and their one-sided conversation was a continuing complaint against his accommodations. The tight-lipped guide, in silent retaliation, erected the tent sloppily, threw a dozen or so boughs on the ground inside the



SPORTING CAMP ON MILLINOCKET LAKE, AROOSTOOK RIVER.

tent as a fir bed, slapped together what must have been a bare-bones supper, and retreated for the night at a distance from his client.

Most tent campers that we encountered were traveling by themselves, except for their guide, or were accompanied by a member of their family or a friend with similar interests in camp life. Two in the party might share one guide. I don't recall meeting more than three or four campers in a party — never the large groups such as those encountered today. Many tent campers were repeaters, returning year after year. They always employed the same guide each year, and deep personal friendships developed between them.

We enjoyed meeting and talking with these sports. They were, as a rule, well informed, and anonymous as to wealth and social position. They had a real interest in and considerable knowledge of woods lore. They were there because they loved the woods. They had leisure to study nature. They were easily at home with those of us whose appreciation of the forest might be thought tainted by our urge to earn a living in it. Only a few of those whom I met could be classed as "little old ladies (or gentlemen) in sneakers," whose fanatical zeal for the sanctity of all things in nature made it a sin, in their eyes, to cut a tree for any purpose.

5

THE HUNTERS

*...the hunter-state of man, when dinners
were precarious things,...*

Charles Lamb

Each Fall witnessed a massive invasion of the woods by hunters intent upon a vacation and the bagging of a deer or other game. Many who worked in the woods the year round were "sometime" hunters, but their objective was food, not the thrill of the chase.

For small parties like ours, working in the backcountry, it was obviously impossible to look to our regular supply depots for such a perishable item as fresh meat. It was therefore common knowledge that we might bend the game laws a bit. If we were discreet in our actions and frugal in what we used, there was little likelihood of interference by game wardens.

In these circumstances I did kill a goodly number of deer and partridge, the former both in and out of season. Generally the weapon was a revolver, and the deer would be standing, which gave good reason to believe that it would be killed, rather than wounded.

Probably because I was suffering from or threatened with the pangs of hunger at the time, I never had a serious moment of remorse as I came upon the quarry, dreadful and

pathetic as the sight of a dying deer may be. Or rather, my remorse was much as it would be in the slaughter of a beef animal. To me, there is as much pathos in the sight of a fish struggling vainly on a hook as there is in the death of a deer from a well-placed shot.

Only at odd times did we have a rifle with us. As a rule, each member of our party had a revolver and always wore it in the field. We were not unique in this, for many woods travelers, except the lumberjacks, were similarly equipped. My first revolver was a Colts 38-40 with long barrel. It proved cumbersome, however, and the ammunition was both bulky and heavy to carry around. It was soon replaced by a Colts Officer's model, 38 special with long barrel. This fine handgun is still in good condition, except for the blueing and a little dent in the muzzle. The dent is witness to a time when I fell heavily on a rock slide. The muzzle, projecting from the open-end holster, came up against a rock with almost as much force as my boney posterior.

Actually, I have never cared for hunting as a sport, perhaps because I am not a good marksman, though I like to flatter myself that the reason is more deeply rooted.

Two incidents reveal that I am an indifferent marksman. One occurred while we were living on the Klamath Indian Reservation in Oregon. There I traded an Army Springfield rifle for a shotgun. It had shot straight for its former owner, but I never seemed to be able to hit a duck or goose with any consistency. Then somehow the barrel became bent, and I had it "straightened" by a local gunsmith. Thereafter, I began to bring down birds a bit more frequently. This suggests to me that the barrel straightening had been only partially successful, and that after it was done I was shooting somewhere other than where I thought I was aiming.

A similar incident can be traced in these entries from my Maine woods diary:

Oct. 7, 1919: We all went down to Chamberlain Farm again today. We weren't all going, but we ran out of flour. Reason — some flour got kerosene spilled on it on the way up. I bought a

35 Remington five-shot repeater rifle from Fred Salkeld. It is third-hand, but in good condition except for the stock.

Oct. 15: Rain in A.M. Three of us went hunting, and Charlie got a deer.

Oct. 20: . . . Charlie shot a 10-point buck.

Oct. 27: Henry DeRusha shot an eight-point buck and was duly elated — "The biggest deer I ever saw." [Henry never became blasé about his hunting. Several years later, when we were camping on a lake shore, he took the canoe and a revolver and paddled quietly around a point of land. There was a shot, followed closely by another. Shortly he came paddling back, singing at the top of his voice, and with a deer aboard. He described the hunt in detail: how he spied a deer, eased up within pistol range, aimed at a vital spot, and "I fired once and missed. Then I fired again and hit him right where I missed him the first time."]

Jan. 10, 1920: Cruising again. George got a high bush rabbit with my rifle. To date, Charlie, Jack, Henry, and George have got one with my rifle. My record with it is none at all.

This record may suggest that we were taking an exorbitant number of deer. But it should be noted that there were nine of us in the crew, and all supplies were a long way off. Every bit of usable meat was consumed, much of it in the form of stews that made even the toughest parts palatable.

Some years there was an abundance of partridge, which we used only during the prescribed season. When flushed, most of the covey would fly into nearby trees or bushes, where they provided sitting targets for a revolver. The first shot would send them all flying, so one bird to a covey was the limit of our bag. Not sporting, of course, but what do you do when you are hungry and have no shotgun?

I have mentioned the time when, unhappily, I bagged a bear. There was another time when the bear came off better. There was deep snow, and it was cold. Then there was a January thaw, with rain and a thunderstorm (a not uncommon spell of weather). Soon it turned cold again, with a light snow. Henry and I were on our cruise line the next day when

we came upon bear tracks. Of course, the bear should have been safely in hibernation, but it had apparently been chased out of its den by the thaw.

This was so unusual that we abandoned the cruise line and followed the tracks. They wandered along a hardwood slope and circled every overhanging rock, hollow tree, and brush heap. Evidently the bear was seeking new quarters to sleep off the rest of the winter. Excitement mounted as we expected, momentarily, to see the tracks end at the entrance to a new den. Sure enough, we came to a little opening where several spruce trees had blown down, with their tops overlapping to form a high brush heap. The tracks wandered about in front of the pile and then went straight under it.

I stood guard with revolver and small ax while Henry circled the pile. He found no tracks coming out, so after a strategy session he stood guard with his revolver while I clambered on top of the pile to scare the bear out. As I neared the top of the heap the dry branches gave way, and I plummeted down until stopped by my outstretched arms. That was no place to be, with a peevish bear ready to take a swipe at my dangling legs.

"Do something!" I shouted to Henry.

"What?" he shouted back, but I had no helpful answer to that question.

I began to kick my way out, but my snowshoes caught on every stub of every branch. When there was still neither sound nor action from below, despite the inviting target my legs provided, Henry circled the pile again. To my relief, he found that the bear had, after all, come out on the far side, perhaps during our attack upon its new home.

Apart from the deer, partridge, and bears, my hunting exploits were about on a par with those of many farm boys of the time. I trapped a couple of mink, with prime skins, and a little bobcat that we let go. And I got a nice coonskin the hard way.

One night a light powder snow fell on top of the crusted snow. The next day I came upon a big racoon, which promptly treed in a ten-foot sapling in the middle of a fir

thicket. Somehow I had the notion that coons are lethargic in their movements, like porcupines. So I cut down the sapling and sauntered over to where the animal had fallen out. But Mr. Coon had other ideas and beat a rapid retreat in a beeline up the hardwood slope. I couldn't keep up with him, but he evidently knew where he was going, so I followed along. In about a half-mile the tracks led to the base of an eighteen-inch hemlock which showed the marks of many climbings. He wasn't in the branches, but the dead top of the tree had broken off, and I assumed he had a nest hollowed out in the rotten top.

The hemlock was free of branches for some distance from the ground, but a small spruce alongside conveniently grew into the hemlock branches. So with revolver in holster I climbed the spruce, transferred into the hemlock, and continued until my face was about a foot below the broken top. As I perched there, winded, a black nose poked over the edge of the hollow.

I was still stumped. To climb higher would have put my face within reach of those efficient claws. To shoot through the thin shell of the hollow top would have meant holding the muzzle of the gun close to my face. Aside from the hazards of flying bark and dust, I recalled the many times I had heard the zing and whine of a bullet as it ricocheted after striking a frozen hemlock knot. In fact, there was one time when one of us had fired at a porkie high in a hemlock. The bullet hit a knot instead of the porkie, whined away, and landed almost at the feet of the marksman.

Finally I selected the safest-appearing part of the tree shell, leaned away as far as possible, and fired. I was lucky and the raccoon wasn't, so my wife, Pauline, became the proud possessor of a coonskin neckpiece, which was a fashionable item at the time.

We saw fox tracks in the snow frequently and less frequently caught glimpses of the animals themselves. More often we would see them far out on the lake ice, working their way from one island to another. Sometimes we would fire a revolver, though not at the fox because he would be at an im-

possible distance. But when the sound of the shot reached the fox he would break for the nearest island on the double. Then, as an echo of the shot rebounded off the island, he would somersault trying to reverse direction. It was particularly frustrating for him if he was on glare ice, where the reverse effort would put him flat on the ice with legs spread in all directions.

Skunks were occasional nuisances around camp, but no real problem — except one time when one of our crew shot a skunk on the threshold of our cabin. One must go through that experience to learn how thoroughly a skunk can express protest at his sudden demise. In this case, we moved camp in a hurry, and the cabin remained vacant for some time.

The preferred procedure at night was to shine a flashlight at the little fellow until he turned and ambled off into the dark. (Unfortunately, one time he took a quarter-strip of bacon with him, and bacon was one of our luxuries.) Of course, this method might not work in more densely populated areas where skunks are accustomed to man's presence.

One time we found a skunk living under a cabin we had moved into. It invaded our larder during the day, while we were away from camp, wandered in through the cabin door while we were asleep, and made a general nuisance of itself. Something had to be done, so Bob volunteered to take care of it if the rest of us would stay clear.

That night Bob put an open-topped cracker box on the cabin porch. Some attractive garbage was spread over a spring trap in the box, and the toggle chain of the trap was fastened to the end of a slender ten-foot pole. After we were in bed we heard the skunk on the porch and presently the sound of the trap as it grabbed his leg. All night the skunk worried about at the end of the trap chain, but made not the slightest odor. Bob stayed behind when the rest of us left for work the next morning. He carefully wound the chain onto the pole until there was no slack. Then he quickly hoisted trap and skunk into the air, so the captive lost the bracing power needed to protest. With the pole over his shoulder Bob walked a sufficient distance from camp, then jumped clear as he dropped the pole.

A shot from a safe distance settled the matter, except for retrieving the trap some days later.

Some readers may be disturbed by this seemingly callous reference to the use of a leg-holding trap, because such traps are now widely condemned as cruel and inhumane contrivances. However, it should be remembered that this skunk-trapping incident occurred more than a half-century ago. In those days we were two or three generations closer to the French-Canadian trappers, the Mountain Men of the Rockies and beyond, and the Hudson's Bay and American Fur companies. Many farmers in those days supplemented their cash incomes by trapping muskrats, weasels, mink, and other fur bearers. Leg-holding traps, and even more inhumane devices, were widely used. Such traps were advertised in Sears, Roebuck catalogs and elsewhere and could be found in practically all rural hardware or general stores. The cruelty of such traps was not the subject of widespread condemnation, as it is today. Nor were the more modern "humane" traps on the general market.

Customs change with the times and with the changing attitudes of our citizens who are steadily drifting farther from the pioneer conditions with which their forebears were confronted.

Much of our precious ammunition was used on the porkies, though this could hardly be classed as hunting. In the winter these animals could be found perched high in the trees, where they would stay for days on end, feeding on the bark. Aside from what we considered a justified mission of destroying these woods pests, they provided good target practice, for they were often at a considerable distance, with the line of sight restricted by intervening branches and twigs.

Mention should be made of the hunting dog one of the boys brought with him one Fall. There was a touch of cocker spaniel somewhere in his mongrel ancestry, which gave rise to the hope that he would be helpful in bird season. Unfortunately for these hopes, all of his three or four years had been spent in town, where his sole mission in life had been to make friends with the whole world. The wag of his stubby tail

continued all the way to the tip of his nose, which gave rise to his name, "Wiggles." The woods were a new mystery that sent him into an ecstasy of exploration. He had some nose for animal scents, but not the intelligence to go with it. We lost count of the times he would suddenly race headlong around a log, or into a thicket, only to come whimpering back with face and mouth full of porcupine quills. We carried a pair of pliers with us just for the painful task of pulling out the quills, while he whined but made no move to bite us. Next day the lesson would be forgotten, and he would head for trouble again.

Wiggles didn't have the hunter's instinct for partridge and never discovered the relationship between the sound of a shot and the need to find a fallen bird. We tried pointing out the bird to him before we shot and then hauling him along by the collar when we went to retrieve it. It meant nothing to him, however. The bird was motionless and therefore of no interest or importance. His only spark of real intelligence was shown on one of the nights when the skunk walked into our cabin. Then we were awakened by Wiggles's whining as he jumped into his master's bunk and crawled to its farthest corner. Perhaps he had learned about skunks downriver. Wiggles was a dumb little mutt, but we loved him.

Anyone who has camped in the Maine woods knows the Canada jay, or camp robber, or gobbie, as we called him. As we sat around the lunch fire we would generally be joined by one or more of these friendly fellows. They would flutter from limb to limb close by to make their presence known, and a bit of biscuit or scrap of meat tossed almost at your feet would be scooped up promptly.

Gobbies also visited us in camp. One day when we were held in camp by bad weather we placed a cracker box in the yard, open side down. One end of the box was propped up with an eight-inch stick, and a long string tied to the stick was carried to the cabin door. A biscuit was placed on the ground under the box, with crumbs scattered as a come-on. In no time a gobbie flew down, ate the crumbs, and went on to the biscuit. A jerk on the string and he was our captive. Then we

let him go and reset the trap. We captured the same fearless, or dumb, gobbie time after time, until he was stuffed and we were tired of the game.

Old beaver dams were common in the Allagash Stream region, but new workings were relatively scarce, and we saw but few of the beaver themselves. Otter signs, including slides they had made along stream banks, were a novelty in our daily wanderings. It may be that the beaver and otter were just recovering from over-trapping in earlier years. And moose were less common than they appear to be today.

Many other animals deserve mention for their contribution to the pleasure of Maine woods camping. Each person has his favorite among them, and most people have some particular experience to remember. Pauline's is her encounter with a moose in the fall of 1963.

We were parked for lunch on a steep-pitched side road about fifty yards off the truck road to Telos Lake. The side road was merely a bulldozed clearing through a dense stand of spruce saplings, with all the uprooted saplings and other debris from the road pushed aside to form a jungled mass of heavy trash on either side of the road. After lunch I stepped into the woods for a couple of spruce seedlings to take home. Pauline was putting the leftovers from lunch into the trunk of the car when we heard a truck coming along the main road. Next there was a terrible clatter and a bull moose appeared, charging down the side road straight toward Pauline and the car. That moose had an important decision to make — fast. He could either continue on course, to collide with the car — and Pauline — or swerve off the road into the tangled mass of down stuff, which would be heavy going even for a moose. With no more than three jumps left in which to settle the issue, he suddenly swerved and went crashing and floundering through the roadside jungle, his nostrils flaring and his head up to lay the big rack of antlers back on his shoulders. It was, in truth, a narrow escape for Pauline.

Later we returned to Kidney Pond Camp, where we were staying, only to find that we had missed some "real" excitement that afternoon. Two moose had been seen, the other

guests told us, all agog, and what's more they had been only a quarter-mile from camp!

As for the seedlings, they withstood the shock of transplanting, and now we point with pride to the two "moose spruce" in our yard.

My peculiar lack of interest in fishing as a sport caused me to develop considerable ignorance of the subject during my years in Maine, and time has no doubt clouded what little knowledge I did gain. But the mere fact that fish were not an important or frequent feature of our subsistence lends weight to my belief that fishing in the waters of backcountry Maine was not too good. Lakes and ponds were not being stocked with hatchery-bred fish to the extent that they are today. And I imagine even the relatively small number of "sports" at the time was sufficient to overfish the more popular waterways. Guides and others would sometimes make a vague reference to streams or ponds off the beaten track and known to only a few, where the fishing was excellent. One of these was Cofalos Pond, and men of our party had great success on the few times they tried it.

I do remember one time when Henry and I worked out of a spike camp some distance from the rest of our party. We packed in enough food for a week, believing that was sufficient time for the work in hand. But there were several days of drenching rain, and we found ourselves with a couple of days' work still to be done, and our supplies down to some cornmeal, a bit of white flour, and salt pork. (Have you ever tried to make corn bread, without the addition of white flour, that would hold together while being carried for half a day in a lunch pack?) Despite the muddied and swollen stream, we were able to catch several trout each evening in a pool just below a washed-out dam. They were small, some of them probably below legal size; but they were a good supplement to our meager rations.

From what I hear, I believe that both the fish and game populations are in better shape today than they were in the 1920's, thanks to intelligent management by the State.

6

SHIN POND

Bless, then, the meeting and the spot;
Charles Sprague

Shin Pond is a place with very special meaning for me. In the days of which I speak it was, for all practical purposes, the end of the auto road. Although one could drive a mile further to some abandoned farm buildings called Crummits, there was no reason to do so, for the outside world ended at Shin Pond. Beyond lay an unbroken forest of several million acres: the vast commingling fountain-heads of the Penobscot, the Alagash, the St. John, the Aroostook, the Kennebec, and other rivers — each with its maze of lakes, ponds, and streams.

Shin Pond was a gateway to this backcountry, and the place where a lumbermen's hotel and other facilities were operated by an unusual man, Zene Harvey, and his family. Above all, Shin Pond is where I first met Pauline, and where we spent two memorable winter months shortly after we were married.

To reach Shin Pond we used to leave Bangor early in the morning on the Bangor & Aroostook Railroad. Its tracks ran north, with many branch lines, through the famous Aroostook County potato country, to reach the border towns along the St. John River. Across the river was New Brunswick,



WE MET AT SHIN POND
The weapon was a borrowed prop.

Canada. The railroad was almost literally the lifeline for the area it served, because in those days auto travel in the Aroostook country could be something of an adventure, especially in winter. The train stopped at every crossroads depot, but eventually it reached Sherman Station, where we transferred to a one-car branch line for the short haul to Patten.

If the roads were passable we would continue to Shin Pond in time for lunch. In winter we would generally have lunch on the train and reach Shin Pond in the evening by horse-drawn conveyance. Sometimes we would stay in Patten overnight. This was no inconvenience, even though the hotel in Patten had burned a few years previously, for Mrs. Hamm's lodging house provided fine accommodations.

The ten-mile road from Patten to Shin Pond led first through potato and subsistence farms. Farther out it came to old farms, abandoned in Civil War days, that were reverting to forest. Then it passed through the cutover forest, bridged a stream between the Upper and Lower ponds, climbed briefly through a cleared field, and came to an end at the settlement of Shin Pond.

The dominating buildings were the wooden Shin Pond House, a huge barn, an equally large warehouse, and a blacksmith and woodworking shop. At one time the post office was in the hotel. Later, Zene put up a little one-story building for the post office and a general store. Back of the store on a scenic overlook there was a row of several log cabins that were rented to transient sports and hunters.

The main business at Shin Pond was to provide transfer and storage facilities for supplies going in to the logging camps and overnight accommodations for the woodsmen. Similar functions were also performed for two rather sophisticated sporting camps (Birch Point Camp on Upper Shin Pond, and Wapiti Camp on Davis Pond), and for the owners of a few private camps on the Lower Pond.

The commercial telephone line ended at a wall phone in the hotel dining room. Beside it another wall phone was the civilized end of a ground circuit telephone that reached to an astonishing number of logging camps and state wardens'

camps. There was a switching arrangement through which the woods line could be hooked up to the outside line, but there was no guaranty that conversations would go through satisfactorily, so one of the Harveys would listen in and, if necessary, relay the message.



ZENE HARVEY AND THE AUTHOR IN 1937

To think of Shin Pond is to remember Zene Harvey. When I knew him he was a tall, dark-haired, well-built, and slow-moving man approaching fifty years. A bit of a slouch to his shoulders suggested strength, rather than lethargy, although I never saw him put forth any heavy physical effort. He supervised those who did the work around the place.

As a rule Zene was a mild-mannered individual, with a friendly and tolerant manner that drew people to him. Flashes of quick temper, however, were reminders that his orders

were not to be ignored. He was the confidant of many and the repository of information and gossip. His knowledge of the woods country back of Shin Pond, and its people, was remarkable.

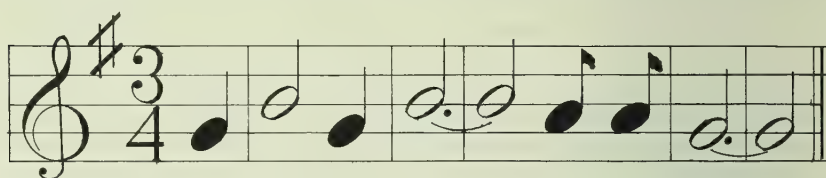
However, it was this strong-minded individual's interest in the outside world and his share of Down East humor that make him live in memory. He was a staunch Democrat which, in itself, made him a man of interest in this land of dedicated Republicans. He received each issue of the *Congressional Record* and is the only man I have ever known who read every word of every issue. He was amused by the pompous and pointless speeches that Congressmen often insert in the *Record* to feed their own egos and to impress their constituents. The more serious items he studied carefully. He liked to discuss these weightier matters, either to inform the listener or to debate the issues, although I doubt that anyone changed his opinion once it was formed.

Zene was something of an untrained philosopher. If he had been a man of greater leisure, and with a better education, his active mind would probably have led him to a reading of the classics, seeking questions on which to ponder. Strangely, though, I don't recall that he was a reader of the Bible, nor do I recall him expressing an opinion on matters of religion.

He was the directing force and boss of the little community in which he lived. From there his influence reached out as he became Director of a bank and a man of substance generally. At the same time he seemed to have created for himself a separate, more detached world of his own, which he would explore by himself or in company with kindred spirits.

Sometimes Zene would put on his comic skit. Audience reaction to the unvarying routine was amusement tinged with embarrassment, something like watching Woodrow Wilson play the part of a country bumpkin at a church social. If several transient guests were still in bed at the sinfully late hour of seven o'clock of a Sunday morning, Zene would go to the

foot of the stairs. In a harsh, nasal tenor he would break into song that can only be described as it might be recorded by a musician:



RISE UP YOU SLE - EE - PING BEAU - TIES

Climbing to the second floor he would repeat his musical masterpiece at a half-tone higher pitch; and repeat again, for a still higher-pitched finale. That was it. Zene would return, smiling, to his first-floor audience, secure in the knowledge that his efforts would be applauded and that the sluggards would respond promptly.

Mrs. Harvey's concern was with the hotel which, under her management, had a reputation for clean, comfortable beds, an abundance of appetizing food, and a sincere welcome for her guests. The second floor of the hotel was given over to bedrooms. Furnishings of each room included a double bed; a dresser with its basin, water pitcher, and slop jar; a wall mirror; perhaps a picture on the wall; and a thunder mug under the bed.

Meals at Shin Pond were notably good. In quality and variety they equaled the best of country kitchens. In volume and heartiness they were geared to the appetites of lumberjacks and teamsters. Food was served family style at long tables where conversation was not only permitted but encouraged, within reason.

Mrs. Harvey's able assistant and close companion in this world of mostly men was her sister Lula Hatt, known to all as Aunt Lula. Although confined to a wheelchair she was constantly busy in the kitchen, or post office, or store. Whenever there was a lull in these chores her hands reached automatically for the knitting that was always at her side. Somehow you were not too aware of her physical handicap. What you

saw and what I remember was an energetic and friendly person. It was always a pleasure to meet and talk with Aunt Lula.

The fourth resident member of the family was a son, Vernon. In his mid-teens at the time, he was already earning a reputation as a mechanic and as a good man around gas engines and automobiles. A daughter, whose name I think was Velma, spent part of her time at Shin Pond, and while she was there, she carried her share of the workload.

This, then, was the family that served its guests so well, for many years, at the settlement of Shin Pond, at the edge of the northern Maine wilderness.

Upper Shin Pond reaches into Township 6 Range 6, which was owned by our company. A point of land juts into the water at the head of the pond. At the time, there was a sporting camp on the point, in an attractive setting of white birches and pines. Hence its name, Birch Point Camp.

White birch, also known as paper birch or canoe birch, is often found in the North Woods, because it is among the first of the tree species to appear on heavily-burned lands. Eventually it gives way to conifers or to other hardwoods, which then become the dominant species. Concentrations of white birch, as on Birch Point, could be found over large areas of northern Maine at the time. They roughly traced the paths of devastating conflagrations that had swept the country some one hundred years earlier, possibly including the famous Miramichi fire in adjoining New Brunswick which caused tremendous loss of life and property in 1825. By the 1920's pine was replacing birch on the point, and a few years later the name of the camp was changed to Point of Pines.

It was at Birch Point Camp that I first met Pauline, who was on vacation from her secretarial position with a Wall Street bank. They say there is no such thing as love at first sight. But there is no denying that I fell for Pauline, heels over head, within minutes of meeting her. She was staying in one of the little cabins at Harvey's and had come visiting to Birch Point. Since I was on my way to Harvey's for supplies for our cruising camp back in the woods, I invited Pauline to return to

Harvey's with me by canoe, instead of by the workaday motorboat that had brought her to the Point.

The prospect of an interesting passenger diverted my thoughts from the serious business at hand. So I aimed a borrowed canoe into the pond, put one foot in the extreme stern and shoved off with the other foot, as I had done countless times before — my intention being to bring the canoe alongside the loading float. With one foot in the canoe, the other trailing outboard, and the canoe drifting rapidly from shore, I suddenly woke to the fact that this was a tippy little sixteen-footer, not the steadier eighteen-footers we usually used.

The bow stuck high in the air, with only a bit of the craft riding in the water to give stability. Any attempt to bring my trailing foot aboard invited disaster. But something had to be done, so I made the attempt and was promptly thrown in the water as the canoe rolled over.

This display of incompetence brought the entire population to the scene, with some twitterings of concern among the sports and raucous shouts of delight from the camp guides and helpers. I retired to find dry clothes, but the helpful guides swore they could only find a shirt and a pair of pants belonging to a six-foot giant of a man.

When I reappeared, with the pants legs rolled up, the thirty-eight-inch waist drawn in to my thirty-inch dimensions, and my fingers hardly showing under the sleeves, I expected to see Pauline disappearing down the pond in the motorboat. But she was patiently waiting for me and insisted that I make good on the promised canoe ride. We bailed out the same little canoe and made the trip without further mishap. It was my first witness to the courage, sense of fair play, and loyalty under unhappy circumstances that Pauline has demonstrated these many times since.

The winter following our marriage some work was to keep me in the Shin Pond area for about two months, staying at Shin Pond instead of camping. Pauline insisted that she go with me, instead of remaining in Bangor. I argued, unsuccessfully, that it would be cold, she would be snowbound, and it would be a dreary place for a girl who had so recently been a



BIRCH POINT COTTAGES

BIRCH POINT CAMP, WINTER — 1924



Pauline would meet me there.

part of the high-pressure life of Wall Street. So she stocked up on heavy woollies and reading material. We bought one of those recent marvels, the radio — a battery-operated hulk of a machine with three tuning dials and a separate horn speaker.

Zene rented us one of the hunters' cabins. It had no kitchen, so we ate at the hotel. Each morning I would build a fire in the cabin's wood-burning Franklin stove, answer the first call for breakfast, and then start off for all-day solo hikes through the woods back of Birch Point. Upon returning from work on the first few evenings, I expected to find a city-bred damsel in distress, completely disenchanted with her life at the edge of the wilderness. To the contrary, the city gal and her native hosts found so much in common that their days together were never long enough. They dug out a pair of snowshoes, and Pauline was soon trudging all over the place. Frequently, when returning through Birch Point in the evening, I would find Pauline waiting for me while visiting with the Roots, the camp owners.

We would have dinner with them and play some wild hands of bridge, and then the two of us would follow the snowshoe floats that led for a mile across the pond and another mile through the woods back to Harvey's. Who can say whether the nights of full moon or those in the dark of the moon provided the better setting for these little journeys through the deep winter cold?

We learned later that on Pauline's first unescorted trips to Birch Point her progress across the pond was under the protection of Mrs. Harvey, who checked on her at intervals through binoculars. After the first few trips she decided that things were under control, and this kindly service was discontinued.

On many days Pauline was so taken up with her developing friendship with the Harveys that she had no time for outdoor explorations. Zene took good-natured advantage of her secretarial skills by having her handle his considerable correspondence with state officials and others in positions of public authority. His library included Blackstone and other texts which he frequently cited as authority for his opinions.

Evenings we might play cribbage or listen to the radio. But we generally joined with Zene in long conversations that settled many affairs of state. The talks were enlivened by Zene's habit of finding similarities between weighty matters of the world and local events that he had witnessed.

There was no chance for time to hang heavy, because different transients from downriver stopped by on their way into the woods. Among these visitors were Commissioner Neil Violette and other men from the Forest Commissioner's Office (or whatever it was called) in Augusta. Our radio was moved into the little post office and store, and we would all gather around to play with this novelty. When faint but intelligible signals came through we would all exclaim, "Hear that?"

One evening nothing seemed to come through except a prize fight. Hoping to find something more high-class, we kept twirling the dials. When we finally stopped fishing for other stations and resigned ourselves to the fight, the most august of the downriver company said, "Thank God — that's what we want to hear!"

Our two months at Shin Pond were completely successful. The reading material we had taken with us remained in our packs, untouched.

Other visits and countless other incidents helped to strengthen our ties to the Shin Pond of yesteryear. Like the fall evening when dinner was delayed while the dining table was used as an operating table for a hunter who had taken a bullet in the leg. And the stormy day when we were held indoors and volunteered to make fudge, only to find there was no milk at hand, but an abundance of heavy cream. And the time when a good friend from the city went for a short solo hike in the woods and returned thirty-six hours later. One wrong turn on the path, and he was completely lost. He saved himself the next day by stumbling upon a recently abandoned logging camp and following the telephone line back to Harvey's.

It was during the earlier years of my work in Maine that I passed through Shin Pond most frequently, en route to work assignments in the backcountry. With a change of employers

my path led more frequently in other directions. And as responsibilities changed, pulpwood camps, rather than tent camps, became a more frequent part of my life.

7

THE PULPWOOD CAMPS¹

*You 'member de ole log-camp, Johnnie,
up on de Cheval Gris,
W'ere we work so hard all winter,
long ago, you an' me?*

William Henry Drummond

All of the Allagash country that I knew had been logged at least once, beginning in the 1830's. To the casual eye there was little evidence of the earliest operations. Closer inspection sometimes revealed the rotting remains of a huge pine stump, or a change in the composition of the forest that outlined an old camp clearing, or the equally faint tracery of old hauling roads. There were other campsites of somewhat later vintage where the buildings were rotted down but still faintly evident. And there were still other camps, of the most recent operations, where the cabins were in disrepair but still standing. It was these cabins that we refurbished and occupied from time to time.

To me, the older camps were ghosts out of the past, and I would try to reconstruct them, mentally, complete with the men who had occupied them. I pictured these men as hard-

¹This chapter appeared, essentially in this form, in the July 1970 issue of *Forest History*.



AN OLD CABIN

We used this one in late Fall of 1919. Tents spread on the roof leakproofed the bunks.

bitten types of another era, a cut different from any to be found among the woodsmen of my time. Now it is a bit disconcerting to realize that some equally imaginative youngster of today may view with equal wonder the faint outline of Murphy's camp on Telos Lake, for I was once a part of that camp's experience. If today's youngster and I should meet, would I fit into his concept of the old codgers of the past? Or can I salvage my vanity with the hope that he would then re-touch his mental picture of those old inhabitants and add some color of life to their ghostly features?

Today's pulpwood camps must be quite different from those that I knew. Truck roads have emancipated them from their former isolation, and automation has changed the character of the logging operations. These changes, together with more involved labor-management relations, must also have altered the character and attitudes of the workers.

Winds of change were blowing through the Maine woods in the 1920's, but they were gentle breezes indeed. The recent World War had demonstrated the value of automobiles and

trucks, and they had become a common sight in the cities. In rural areas, however, they were still at the threshold of their usefulness, largely because the roads were still of the horse and buggy age.

One pulpwood camp, typical of its day, lives in my memory because there I finally convinced Jerome Thurlow that I was something more than window-dressing in the company's organization. Jerome was the company Walking Boss — a sort of field general in charge of several pulpwood camps, with each camp having its own resident boss in charge of day-to-day operations. Jerome looked upon me, a forester, as one of the company's newfangled notions, to be tolerated but not welcomed in the woods.

I had estimated that there was sufficient pulpwood on a tract of land in Hancock County to justify building a camp for a two-year operation. Jerome claimed there wasn't enough



CAMP PERSONNEL

Far left, camp cook; far right, camp clerk. Driving is Jerome Thurlow, the Walking Boss. The rocking chair was the crooked knife product of its occupant. The "pung," drawn by a light team, provided fast transportation.

timber for one season, let alone two. When the decision was made to accept my estimate, Jerome grumpily demanded that I scout the land with him, to find a camp location to cut the timber he believed to be largely nonexistent. We also laid out a tote road location between the proposed camp and the depot camp on Nicatous Lake.

A small crew of men with teams and tents walked in to the campsite before tote road construction got under way. In short order they cleared the campground, staked out the building locations, and began skidding in spruce and hemlock logs for the cabin walls.

Tote road construction was to a very low standard, indeed, but adequate according to current practices. It consisted of clearing the right-of-way, with stumps cut low enough to give clearance for the tote wagons. Some wet spots were corduroyed, a brook was spanned by a short bridge, and the largest stumps and boulders were blasted. The road was then open for travel by the horse-drawn wagons.

I was always intrigued by the slow, lurching, but steady progress of tote wagons over these crude roads. The teamster, a specialist in his work, was perched high on the spring-mounted seat. The teams, of two or sometimes four horses, were wise in their work. The sturdy wagons, with their rather high wheels and loose-jointed construction, reflected the years of experience and ingenuity of their builders.

Wheel tracks in the road became a constant repetition of chuck holes between high-standing stumps and boulders. At a given moment one wheel might be climbing out of a chuck hole, another might be ready to plunge down into one, a third might be skidding and grinding sideways on a sloping rock, and the fourth could be mired halfway to the hub. As the horses found their precarious footing they would strain against the heavy load, only to have it run up on them at the next turn of the wheels. In winter these tote roads were smoothed over by the packed snow. Sleds replaced wheels, and the whole process of freighting supplies into camp became easier.

Lumber and other building materials, including a few windows cushioned in hay, were hauled to the camp on the first loads over the new road. The finished camp was a sixty-man layout, which is to say that the men's room had bunk space for sixty men. This building was twenty-four by forty-eight feet, providing a bit less than twenty square feet per man for sleeping and all other off-duty life except eating. Double-deck muzzle-loader bunks with deacon seats, typical of Maine logging camps of the time, lined one of the longer walls and extended two-thirds the length of the other. The lower tier, or deck, of these bunks was nothing more than the cabin floor. One-by-eight-inch boards, set on edge parallel to the cabin wall and distant from it by the length of an ordinary bed, formed the footboard and converted this part of the floor into a maxi-width bed which was subdivided into double-bed widths by one-inch boards set on edge. The longer the cabin the more men such a bunk would accommodate, with all hands lying head to the wall and feet to the footboards.

The upper deck was similar, being a board platform over the lower bunk at shoulder height from the floor, and with footboards like the lower bunk. At the foot of the bunk was the deacon seat — an immovable, backless bench fastened to the poles which supported the upper bunk.

The bunks had no springs or mattresses, but they were provided with a liberal thickness of hay or straw, which each man could renew at his own pleasure. Each double bunk had two or more double spreads and sometimes a summer-weight cotton blanket. There were no sheets, but thin pillows without pillowcases were sometimes provided. Most men discarded the pillows because they soon acquired grimy evidence of overuse. The intention was to wash the spreads once a year by dunking them in hot, soapy water. Sometimes the annual wash was overlooked, regardless of how many men had used the spreads. Their average life was considered to be four years, so they were generally quite ripe before they were discarded.

PULPWOOD CAMPS



"MY" PULPWOOD CAMP NEAR NICATOUS LAKE



ANOTHER PULPWOOD CAMP

The remainder of the second long wall was given over to a water barrel and a long wooden sink with wash basins. In winter the grindstone was brought in from outdoors, so the men could sharpen their axes alongside the sink. Two roller towels, supposedly changed daily, were used by all, and bars of yellow laundry soap were provided.

Windows over the sink and one over each door or let into the roof provided daylight and ventilation. There was a door at each end of the building. Two ramdown stoves occupied much of the floor space between the rows of bunks. There was an old-fashioned wash boiler on one of them, to provide hot water for any who might want it when washing up. Stacks of firewood between the stoves were replenished regularly by the bull cook, as the camp helper was called. A homemade card table with nail kegs for chairs took up part of the remaining floor space.

The walls, like those of all the camp buildings, were of small logs, seven feet long, set on end, and chinked with moss or other material. The sloping roof of the men's room rose from the seven-foot eaves to a total height of fifteen feet above the floor at the peak, which ran lengthwise of the building. Men could easily touch the sloping roof, less than two feet above their heads, as they lay in the upper bunks.

Telephone wires were strung the length of the room, high enough so clothing hung to dry would be out of the way, and also high enough to benefit from the trapped heat under the peaked roof. A few kerosene lanterns hung from the rafters were turned down, but not extinguished, during sleeping hours.

All of the furnishings — bunks, stoves, tables, etc., took up their share of the space allowance of twenty square feet per man, so standing room was very limited. Altogether, it was a snug fit for sixty men, to say the least.

Unless you came to the camp with a buddy, you shared a double bunk and its double spreads with a stranger. You also shared the bedbugs that were almost invariably present. In winter especially, when the wires were loaded with wet clothes, the air became heavy and stifling. If it became too

overpowering for you, you might pull out a bit of the caulking between the wall logs at the head of your bunk. This would send a stream of fresh and icy air in on your head. If you didn't catch cold, and if your bunkmate didn't object, this gave some relief.

The door at one end of the men's room opened upon the dingle. This, like a present-day carport, was a twelve-foot space between the men's room and the adjacent cookroom. The dingle, roofed over, open in front and walled at the back, provided both a covered walkway from the men's room to the cookroom and storage for bulky, non-freezable foodstuffs and other supplies.

The cookroom, twenty-eight by thirty-two feet, was kitchen, dining room, living quarters for the cook and his crew of "cookees," storage room for some food, and the absolute domain of the cook. Outside of meal hours nobody set foot inside uninvited, except the camp boss and clerk, the walking boss, and the infrequent visitors from the downriver office, like the forester.

An iron rod bent into an open-end triangle was suspended by haywire outside the cookroom. It became the camp tocsin and dinner bell (known as the gut hammer) when another short length of iron rod was used to strike the inside faces of the triangle in rotating succession. Some "cookees" prided themselves on the variety of tones and rhythms they could develop on it.

When the triangle sounded a call to meals, the men filed into the cookroom in orderly haste and took self-appointed places at long tables. You kept your place for as long as you were in camp, and newcomers would wait to find what places were vacant. With experience you learned to take in the meal situation at a glance, so you could load up your tin plate with the items most to your liking from the pans and plates of food placed strategically down the center of the table. The "cookees" refilled them and served tea and coffee, which were drunk from big tin cups.

Complete silence was enforced, except for politely murmured requests to pass something. Rarely, the cook would

start a brief conversation to comment on some momentous event, like an accident in the woods. Occasionally some renegade would violate the silence edict. But he was quickly squelched, unless the cook had failed to please the crew and pressure was being exerted to have him fired. If the men pointedly ignored the no-talking edict, the cook would get the message and either quit or face the prospect of being fired.

A camp's ability to attract and hold men rested primarily, and perhaps equally, on the cook's reputation and on the wages a pieceworker could earn. A good camp cook could afford to be temperamental, for his reputation was well established in all the camps and in the downriver hiring halls. Word that Joe Smith was cooking at Orono's Camp No. 4 was enough to entice men to it and away from other camps.

Most cooks were about on a par in the meat department, perhaps because the variety of meats was so limited and the quality so generally poor. The cook's reputation, therefore, rested upon what he could do with bread, pastry, and baked beans.

The choice of meat products, throughout most of the year, was limited to heavily-salted hams, bologna, salt cod, salt pork, canned clams, and salmon. There might also be limited amounts of frozen beef if the camp was not too far back in the woods. This beef was of the cheap cuts, boned, packed in wire-bound veneer wood cases of about one hundred pounds, and frozen at the packing plant.

For the camp I have described, this frozen beef would be put aboard an unrefrigerated baggage car on the early-morning train out of Bangor for the thirty-mile trip to West Enfield. The company truck would be waiting to haul it another thirty miles to the depot camp on Nicatous Lake. More than half of this truck haul was over an old tote road, "improved" for truck travel by cutting down high stumps, widening the right-of-way at some wet spots to let in the drying winds and sun, and strengthening or extending the corduroy and bridges. The only graveling was where it could be hand shoveled from the side of the road. There was practically no realignment or relocation of the road, nor were the grades

improved. In these circumstances, and with the low-powered trucks then available, the meat seldom reached the depot camp much before noon. There it was transferred to a waiting, lightly-loaded tote wagon for a "quick" haul to camp. It arrived, pretty well thawed out, in the late afternoon and was placed in a fly-proof meat safe in the springhouse. Here the air was cool, but far above refrigerator temperatures.

Each delivery had to be used within a couple of days and, with no more than two deliveries a week, the camp was without fresh meat about half the time. Sometimes the beef became too high before it was cooked, with unfortunate results for some of the crew, and for me a couple of times. In freezing weather sides of locally raised grass-fed beef were brought in, most of it being served as steaks or in stews.

Baked beans, cake, cookies, and doughnuts were on the table three times a day, and part of a cook's reputation depended upon his success with them. Bread, biscuits, and hot rolls were other staples by which the cook's ability was judged. If a good cook could also build good pies and griddle cakes, and if he would serve them often enough, his position among the leaders was assured.

A good cook generally liked to see the men "eat hearty," but if he felt they were going overboard in consuming hot breads or griddlecakes at a meal, he would slow them down by serving up refills of "stoppers," that is, cold bread and griddlecakes.

Both tea and coffee, the former being more popular, were brewed in huge tin or enamelware pots. They were always on the stove, to provide between-meal hot drinks for the cookroom crew and others with visitor privileges in the cookroom. Before a pot ran dry, water and a handful of tea leaves or coffee were added. Eventually the grounds would build up to where the pot had to be emptied and a fresh brew started. Even the first brew was pretty horrible, but it was very warming on a cold day.

The men's room and cookroom formed one side of a quadrangle, with the office and filer's shack on the opposite side. The office was thirteen by eighteen feet. Two double-

deck double bunks, with deacon seat, took up one end. These were side-loading, instead of muzzle-loader bunks, and therefore more convenient. The camp boss preempted one of the lower bunks, and the clerk laid similar claim to an upper bunk. This left sleeping quarters for four visitors, such as the walking boss, the scaler, the forester, etc. The homemade furniture included a small table, a couple of chairs, the clerk's desk, and shelves for wangan supplies. A window over the clerk's desk gave him a good view over the camp yard.

The filer's and teamsters' shack, sixteen feet square, was lined up with the office, but at a respectful distance from it. Three double-deck double bunks provided sleeping room for twelve men. The saw filer's workbench, vise, and saw storage took up one side of the cabin. A window three sashes wide and one sash high over the bench provided light for the filer's eye-straining chore of sharpening, jointing, and setting the saws.

In winter this cabin was literally the hottest spot in camp. When a man spends hours on end, in sub-zero weather, riding a logging sled and holding the reins on a team of heavy workhorses he has little chance to maintain bodily heat through vigorous physical exercise. The cold soaks in to the very marrow of his bones, and when he returns to camp no ordinary room temperatures will thaw him out. At night, therefore, when the teamsters returned to camp, the cabin soon developed temperatures and humidities approaching those of a sauna bath. The ramdown stove poured out great volumes of heat. Steam rose from the snow-soaked clothes hung to dry, and the air became pungent with the essence of horses.

At times I would arrive in camp late in the day, to find all office bunks claimed by earlier arrivals. The choice, then, was between the men's room and the filer-teamster shack. It was a sorry choice but, despite the intolerable heat, the lesser evil was to bunk with the teamsters.

Beyond the teamsters' shack, at the far end of the camp clearing, was the hovel, or stable, twenty-eight by thirty feet, with six stalls on each side. The roof was extended in front,

beyond the walls of the building, to form an open-sided shed for storage of baled hay and other items.

With this camp layout the teamsters were quartered close enough to the hovel so they could hear any commotion among the horses at night. The teamsters could also get out in the morning without disturbing anyone but the filer. They had to feed, tend, and harness the horses before breakfast, to be ready to leave camp for the woods immediately after breakfast, along with the rest of the crew.

Working hours for the whole camp were long. For the teamsters they were even longer, and not only because they were the early risers. They often returned to camp later than the others in the evening and still had to rub down and feed their charges before the day was ended.

A small blacksmith shop and other outbuildings were added later, as the need arose, so the camp gradually lost its semblance of a military encampment around a parade ground.

The loneliest men in camp, in winter, were those who operated the water cart. This was a wooden water tank mounted on a sled drawn by a team of horses. There was a port at each of the rear bottom corners of the tank through which water poured, except when closed with wooden plugs. These ports were located so the water flowed down into the sled runner tracks as the cart was hauled along the road. In subfreezing weather the result was an icy trough for the sled runners, thus making the heavily-loaded pulpwood sleds much easier to haul. On downhill grades the runner tracks were sanded or covered with straw instead of being iced, to provide some braking effect.

The water cart was generally operated at night, when the hauling sleds were not operating, and also at the time when water would freeze most quickly. So the crew was in the woods by itself during the darkest hours.

Water holes were constructed at strategic points along the roads, often by damming a brook. The water cart had a heavy barrel mounted midships on top of the tank and attached by a heavy hinged handle to a cable and pulley rigging. To fill the tank the barrel would be slid down a portable incline and



WATER CART TAKING ON WATER

Note the "cross haul" for loading, with cable running from the water barrel to one of the horses (out of picture to right).

submerged in the water hole. Then, by the cable and pulley device, one of the horses, unhitched from the sled, would pull the barrel full of water up the incline until it dumped its load, automatically, into the tank. This was repeated many times, until the tank was filled. (The ports, of course, were plugged at the time.) When the cart reached the stretch of road to be iced, the plugs were knocked out and the cart was hauled along the road until empty.

The camp was on the lower portion of a gentle hardwood slope, near a brook where a spring broke out of the hillside. The spring was dug out and enclosed in a springhouse, with a shallow trench around it that diverted surface drainage except in times of thawing or heavy runoff. This was the highest point of the campsite, with the cookroom adjoining. The hovel was at the low point, by the brook. The open pit latrine and the dump for camp waste were also on the lower part of the slope, the former being convenient to the men's room.

These arrangements were the total concessions to the demands of sanitation. The spring water was clear (as a rule) and cold, and tasted good. No chemical analysis was made of it. I don't recall that anyone ever gave thought to the idea that the quality of the water might be affected by subsequent logging operations above the camp, with the attendant horse travel and open-air response of loggers to the calls of nature. Come to think of it, we seldom questioned the potability of water in the woods. Lake water, stream water, and spring water were all acceptable for cooking and, if cold enough, for drinking. Exceptions were the stained and distasteful water out of swamps and water immediately below a camp, if we happened to know that there was, or had been, such a camp.

As I have said, the ability of a camp to attract and hold men rested about equally upon the cook's reputation and the wages a pieceworker could earn. Among the factors affecting wage opportunities were the size and density of the timber being logged, walking distance from camp to the timber, piece rates being paid, the temperament and ability of the camp boss, and the competence of the saw filer if saws were supplied by the company.

There were no unions or other organized spokesmen for the Maine lumberjacks in those days. The camp boss, therefore, had much greater leeway in dealing with individuals of his crew. Subject only to company policy and overall supervision by the walking boss, he could establish working hours and pay rates, could hire and fire at will, promote and demote regardless of seniority, etc. So the reputation of a camp boss, like that of a cook, became well-known throughout the region. A boss could be a hard driver and more interested in the output of his camp than in the welfare of his men, but he would still be called a good boss if he knew his business and seasoned his orders with basic diplomacy.

Automation had not yet reached into the woods, so all operations of road construction, tree felling, bark peeling, cutting into four-foot lengths of pulpwood, skidding to sled roads, hauling to stream banks or ponds, etc., were accomplished by manual labor and horse power.

In saw log camps, tree felling and bucking into log lengths were generally done by two-man teams using long crosscut saws. But the pulpwood camps cut trees as small as seven inches on the stump, and the trend was increasingly towards men working alone and using bucksaws for both felling and bucking. Immigrants from the Scandinavian countries, impartially called Swedes, often excelled in this back-breaking work.

I believe it was these Swedes who developed a new technique of self-sufficiency. Instead of buying factory-made saw frames and blades from the camp wangan they would arrive in camp with an ax, a crooked knife, a considerable length of quarter-inch manila rope, a file and saw set, and a narrow band of tempered steel that had once been the spring of a phonograph. With ax and crooked knife they fashioned a three-piece bucksaw frame from a carefully selected straight-grained maple or birch tree. The steel band was converted into a saw blade by beautifully-crafted hand filing of saw teeth along one edge. The blade was then cut to length and a hole punched in each end. The assembled wood frame was like a squat and broad letter H, in which the two legs were the end pieces of the frame and the crossbar of the H was the stretcher. The blade was fastened to the lower ends of the two legs with short nails or bolts slipped through the holes in the legs and in the blade ends. Several turns of rope were wound around the upper ends of the legs, and a short stick was inserted between the strands of rope to provide a tourniquet that put the blade under tension. These Swedes, with their homemade saws, turned out great volumes of pulpwood and, being paid on a piecework basis, they made good wages.

Although the woodsmen were not organized, an abortive attempt in that direction was made in the mid-1920's. The I.W.W. (Industrial Workers of the World), or "Wobblies," had been active in the West Coast logging camps and suddenly word got around that they were going to take over in Maine. Unfamiliar faces began to appear among the constantly chang-

ing camp crews. These strangers would quit after a few days, and later the camp boss would find I.W.W. pamphlets in the men's room.

This situation was a shocker to company officers, and some detective work was mutually sponsored by the mill owners to identify the agitators so they could be blackballed from further employment in any camp. The Wobblies' proselytizing merged into isolated instances of larceny and sabotage. Men would report for work in a camp and obtain clothes on credit, to be paid out of future earnings. They would work long enough to pay for their meals, because of the stringent and enforced laws against skipping a hotel or board bill, and then sneak off with their wangan account unpaid. There had always been some of this activity, but it increased and became coupled with cutting of telephone lines on the way out of camp. This to prevent the camp from phoning word of their defection to enforcement officers.

One week, while this was going on, Pauline was staying with me at the Nicatous Lake depot camp. We learned that three men who had just gone past the camp on the way to town had skipped their wangan bills. After phoning the Sheriff's Office Pauline and I jumped into a car and started the jolting trip down the converted tote road. We didn't expect to capture the men, or even to see them, for they would hide at the side of the road at the approach of a car from camp, but we hoped to identify them at the Sheriff's stakeout. When we met the officers they asked for descriptions of the men. Pauline, being observant like most women, gave an excellent description of one of them. "He's rather small and slim, like my husband here. Brown hair and eyes like my husband's. He's wearing a soft hat and checked mackinaw jacket just like my husband's." Then she stopped as one officer grinned and brought out his handcuffs for me.

The Wobblies' efforts to organize were short-lived and largely fruitless. The idea of organizing was strange to Maine lumberjacks and foreign to their long-established belief that

each man should speak for himself when dealing with his boss. However, these attempts, combined with the gradual improvement of auto roads into rural areas, did have an effect upon employment practices.

Most woods labor was recruited at hiring halls conveniently located in the skidroad section of town. Lumberjacks who had come to town, had spent their wad, and were ready to go back to work would apply at one of these halls. Here there was room to sit and gossip or play cards while waiting for a job offer. In Bangor, there were several of these halls, one of which was generally patronized by our company. When we received word that one of our camps needed a cook, or teamster, or other help, we would phone the hall, giving details as to camp location and wage rates. The hall manager would post this information or inform men that he knew had worked for us before. If only one or two men were being recruited they would be given railroad tickets to the appropriate town and would ride in from there to the depot camp on the company truck. Then they would travel "by hand" the remaining distance to camp. If several men were recruited, the hall had autos to transport them to the depot camp.

The hiring hall charged the employing company two dollars and fifty cents, plus transportation, for each man delivered to the depot camp. Whether the men ever got beyond that point or did any work for the company was no responsibility of the hall. The company, in turn, charged the worker half of the hiring fee and all of the transportation cost, to be deducted from his future earnings. If he didn't work long enough to pay off his debt, the company was the loser.

On the whole, this arrangement worked well enough, from the points of view of the company and the hiring hall, although there were recognized abuses. Sometimes the chauffeur who drove the men to the depot camp would let them know that his car would be parked a half-mile down the road for an hour. "If you don't like the layout I'll haul you back to town free." Then the hall would collect fee and delivery charge from the company and another fee and transportation cost for supplying replacements for the deserters.

There were no unemployment, retirement, vacation, or sick pay benefits for the lumberjacks. The employer had some accident liability, but it was not too well spelled out, or at least I was not informed regarding it. I do recall one man who cut himself rather severely while working at one of our camps. As usual, the camp clerk bound up his wound, but it became badly infected. He was sent downriver and I took him to the hospital. He agreed to undress only after some argument, the reason for his reluctance being that he had a small fold of paper money held to the calf of his leg by the laced bottom of his World War I-style army pants, and another small horde stashed inside his shoe. The next day the hospital phoned that our man had dressed and departed, despite the fact that the infection was serious and possibly fatal. It then became my chore to visit the rooming houses and other places of renown of the Hancock Street area until I found him. He was feverish, but being well entertained by a lady friend, and refused absolutely to return to the hospital. As I recall, the company lawyer concluded that the man's refusal to accept treatment terminated the company's liability, and the case was forgotten.

The items stocked in the camp wangan give some hint of the Spartan life these woodsmen lived. The record of our Township 4 operation in Hancock County during the 1925-1926 season, reveals that these were the only items sold at the wangan:

Clothing: Caps, gloves, mittens, shirts, shoes, socks, pants, underwear, suspenders, and shoelaces.

Tobacco: Cigarettes, cigarette papers, pipes, smoking tobacco (Prince Albert, Apple, and Every Day Smoke), chewing tobacco (Spearhead and Sickle). Snuff doesn't appear on the list, but some was sold. Only 125 cartons of cigarettes were sold during the season. They were a new fad in the woods, and too expensive.

Medicines: Atwood's Bitters, carbolic ointment, liniments (Johnson's, Minard's, and Sloan's), cough syrup, epsom salts, and fly dope.

Luxuries: Ingersoll watches, writing paper, pocket combs, needles and thread, and blanket pins.

Aside from the wangan and whatever the men brought with them, their main source of supply was an infrequent package from home that usually contained knit socks or mittens. There were rare visits from itinerant peddlers, whose stock in trade included cheap watches and jewelry, medicine and some clothes, together with showmanship to entertain their customers.

There were no radios, movies, or television. As a rule, one or another member of the crew would have a fiddle or harmonica that he would play, chiefly for his own amusement. Although ministers of the gospel (sky pilots) may have visited our camps, I don't recall meeting or hearing of them.

Poker games flourished whenever there was sporting money or tobacco that hadn't already filtered into the pockets of the more proficient players. At other times cribbage and checkers were the usual games, and season-long scores were maintained by some players.

This was the accepted way of life for the Maine lumberjacks of those times. Despite the cramped quarters, few disagreements developed into major brawls. When friction became severe, it was often relieved by one of the disputants leaving camp in a huff.

These camps live in my memory as symbols of a way of life and of labor-management relations that are, fortunately, almost a thing of the past in this country. It is truly amazing to recall what a vast amount of hand labor was involved in the camp operations. There were no autos, trucks, tractors, chain saws, or other forms of machine power. Firewood, worked up with ax and handsaw, was the only fuel for heating and cooking. There was no electricity for lights or for other uses. The only sources of power in camp were the horses, the "strong backs and weak minds" of the lumberjacks, the infrequent use of dynamite in road building, and the electric current generated by a hand-cranked telephone to provide communication with the depot camp via a single wire grounded circuit.

There were, it is true, a few camps at the time where motive power was coming into use. In these camps, giant steam-driven engines, mounted on crawler treads for locomotion and with sled runners up front for steering, hauled long trains

of log sleds from the cutting area to landings. But an account of these behemoths is a story in itself and outside the sphere of my experience.

Consider, then, the effort expended in the process of harvesting pulpwood and delivering it to ponds or streams where it would wait for spring floodwaters to carry it downstream to the mills. First, a camp was erected and a tote road constructed between it and the depot camp. All of the work was done by hand and horse power, except for a bit of dynamiting.

Then, beginning early in the season, a network of hauling roads was carved out by hand and horse power, again perhaps with a bit of dynamite. The roads reached from the landings back into all parts of the area to be logged.

In the spring, when sap flowed freely in the trees, pulpwood cutters were sent into the woods. Working as one- or two-man crews, they chopped and sawed down the trees, removed limbs from the merchantable lengths, and peeled the bark from usable portions. A scaler measured the volume of each felled tree, as a basis for paying the cutters on a piecework scale and to provide a production record for the camp operations.

Sometime in early August the free flow of sap would diminish, and the bark could no longer be peeled from the felled trees. The cutters would then return to the trees they had previously felled and buck them up into four-foot "sticks." Either by hand or on a horse-drawn sled they moved the sticks to a nearby hauling road and hand piled them into stacks of cordwood, conveniently placed for subsequent loading on the hauling sleds. The stacked piles were scaled, for payment of this phase of the piecework and for production records. Each stick of wood in the piles was branded by the scaler with a distinctive design, similar to cattle brands, so the company's wood could be separated from that of other ownerships in case they became mixed en route to the mills. A branding hammer or paint was used.

The pulpwood cutters then resumed felling operations, eliminating the peeling process and delivering "rough wood" in cordwood stacks along the hauling roads. This, too, was

HAULING PULPWOOD



LOAD EN ROUTE TO LAKE OR STREAM LANDING

Pulpwood sticks were four feet long. Some sleds were 32 feet long; others were 28 feet.



UNLOADING PULPWOOD ON LAKE ICE

PULPWOOD LANDINGS



Pulpwood on lake ice ready for spring Breakup and start of drive.



Pulpwood piled in midstream and on banks ready for start of drive. Hand labor only used in piling the wood.

measured and branded by the scaler. Pulpwood cutting ended when the camp had produced its quota for the season or when adverse weather halted the operations.

Sometime, generally around Christmas, the accumulating snow and the freezing weather would smooth off the rough hauling roads; and the pulpwood haul would begin. Fleets of horse-drawn pulpwood sleighs were brought into play. The sleighs were generally made in camp by the blacksmith and the wood butcher (carpenter). They were vaguely similar to a flatbed wagon, with sleds taking the place of wheels. Instead of a wagon body there was a pulpwood "rack" or "rick" — two heavy poles, twenty-eight or thirty-two feet long, held parallel to each other and about thirty inches apart, with tall immovable uprights at each end. The rick was mounted, on both the front and the rear sled, by a king bolt, so that both sleds could turn under the rick. Cross-chains were attached, from left runner of front sled to right runner of rear sled, and from right front runner to left rear runner, so that the rear sled followed around curves in essentially the same track as the front sled.

The cordwood that had been stacked along the hauling roads was loaded on the sleighs by hand, the sticks lying crossways of the sleigh, with a top loader on the sleigh and either one or two men on the ground, according to the average size and weight of the pulpwood sticks. The loaders used "pulp hooks" similar to those used in handling baled hay, to get a purchase on the sticks.

When the load of pulpwood reached the landing it was unloaded, again by hand, either by throwing it off if there was ample space, or by laboriously repiling it in high, orderly tiers if landing space was limited, as along narrow stream beds. If the landing was on pond or lake ice, a boom (to be described later) was strung along the offshore edge of the pulpwood piles, with the two ends of the boom secured to the shore so the pulpwood could not escape when the ice melted.

Throughout the hauling season, more hand labor was provided by the "road monkeys" and the water cart crews, who kept the roads in good condition.

When all of this and more was done, the camp operations for the season were completed. The camp was abandoned, except for a watchman, until the spring Breakup, when a small crew might occupy the camp briefly to start the pulpwood away from the landings on its downriver drive to the mills. Then the camp was abandoned again until logging crews arrived to begin another year's harvest.

What did these men accomplish as they worked day after day in the woods? It is unfair merely to say that, with their hands and horse power, they felled the trees, stripped them of their bark, cut them into four-foot lengths, hauled them to the water's edge, and left them to be floated downstream to the mill on the spring floodwaters. They were mostly uneducated men, both native and foreigners, crude by many standards, and often to be avoided when they came to town. At the same time, they were a hard-working and independent lot, ordinarily giving a full day's work for a day's pay. Many were craftsmen who took pride in the work they turned out. True, the man being paid by the cord sometimes short-changed the company by including a stump in the middle of the cordwood pile in which he stacked his wood for measuring. He ran out on a wangan bill once in a while. But it was a rough life of every man for himself. And the employers were as rough in their way as the employees. It was the accepted way of things at the time. A day's work for a day's pay, and the pride of craftsmen in the work they turned out: these were virtues much more in evidence among the lumberjacks I knew than we seem to find today.

Incidentally, but of great importance to me, my estimate held up, and there was enough timber to keep the camp in full operation for a good two years, as I had originally calculated. Jerome Thurlow, being a broad-minded and honest man, accepted me thereafter as a worthwhile addition to the team, and we became close friends.

8

THE PULPWOOD DRIVE¹

*So if not'ing go wrong, de winter's over,
An' not very long till we got de spring.*

William Henry Drummond

In the 1920's the annual log drives were still the most exciting, often the most dangerous, and certainly the best publicized phase of Maine logging operations. Like geese flying north and crocus in bloom, word that the drives were starting downstream was a harbinger of spring. It was assurance that the supply of logs — the lifeblood of dependent mills and communities — was being replenished.

Today, truck roads are pushing into the forest to haul logs direct from stump to mill. And under State law all log drives were supposed to have ended in Maine by October 1976, although some extensions of time may have been granted. The drives are, therefore, fast fading into history. This change is greeted with mixed emotions. Roads open the forest to invasion by motor vehicles, a fact deplored by wilderness purists but welcomed by less sensitive vacationers. On the other hand, stream banks and lake shores will no

¹This chapter appeared, essentially in this form, in the October 1976 issue of *Journal of Forest History*.

longer be scarred by log landings, nor will the waters be filled with and polluted by floating logs — a change that the same purists welcome.

In any event, the drive was a way of life experienced by relatively few, except vicariously, even when it was in full bloom. So I appreciate my elbow-rubbing familiarity with the drives gained while working as a forester and my direct exposure to it in the year that I was assistant clerk on a drive.

Logging camp operations were completed when the year's harvest had been delivered to the landings, with landings on lake or pond ice made safe by a boom. Driving operations would then take over when lakes and streams opened with the spring Breakup.

Late in the winter, when the Breakup was imminent, a small body of men would move in to the logging camp. They would check the landings to make sure that everything was in readiness, especially that the retaining booms at lake and pond landings were in good shape. The camp might have landed its pulpwood at several points along branch streams and on ponds. Each of these would be a separate little drive unto itself until they came together farther downstream, where they would merge and continue their downriver journey as a consolidated operation.

So let's return to the 1920's and follow one of these drives from its origin near the head of Nicauous Lake, across that lake, down Passadumkeag Stream to the Penobscot River, and on down the river to the paper mill at Orono, near Bangor.

This will be a pulpwood drive, of small stuff cut into four-foot lengths. It will originate on a small lake where relatively small volumes of timber are taken out each year. It will differ from the long-log drives that have been so often described and glamorized. There are no timbers large enough to support a man's weight on the water. There will be no exciting tales of men riding logs through quickwater, no stories of massive log jams where men risk and sometimes lose their lives in breaking the jam.

Before starting our drive, let's acquaint ourselves with two of the tools required to transport pulpwood across the

lake. A boom, by dictionary definition, is "a fixed line of floating timber across a river or around an area of water to retain floating logs." Expanding on this, a boom is a string of carefully selected, buoyant logs laid end-to-end, with holes bored near both ends of each log. A short, heavy boom chain is slipped through the hole at one end of a log, and through the corresponding hole of the adjoining log. An oversize ring keeps one end of the chain from passing through the hole. A toggle at the other end of the chain can be easily turned, or hinged, to permit it and the chain to pass through the hole. Otherwise, the toggle remains in normal position, at right angles to the length of the chain, and it is then too broad to pass through the hole. The boom chains are long enough to permit freedom of movement between adjoining logs, but short enough to keep the gap between logs too small for pulpwood to escape.

Thus, the string of logs itself becomes a long, flexible chain that can easily be broken at any joint by hinging the toggle and slipping that end of the chain from its log.

When the ice breaks up at our landing, the pulpwood and boom float in the water. But, with the ends of the boom still anchored ashore, the pulpwood is contained between the boom and the shore. The two ends of the boom are then untethered, floated behind the mass of pulpwood, and chained together. The boom thus becomes an endless chain encircling the pulpwood, and the whole affair becomes a "boom of pulpwood" that can be moved across the lake, like a raft, to its outlet.

But some motive power is required to move this raft, which brings into play the second tool — the "headworks." No doubt the early loggers in Maine had also "gone down to the sea in ships." They were familiar with the art of kedging to move ships from place to place when sails could not be used. Kedging means "to warp a ship or move it from one position to another by winding in a hawser attached to a small anchor dropped at some distance." So these seamen-loggers adapted the procedure to move logs across lakes and other stretches of dead water. Translated to log driving, the boom of



A HEADWORKS

This one, of light construction, may have been used at a millpond, or for bringing logs together to form a boom. The headworks used for towing booms of pulpwood or logs were of heavier construction. (*Photo courtesy of Northeast Archives of Oral History, University of Maine, Orono; and of Forest History Society, Inc.*)

logs or pulpwood becomes the ship to be moved. But, having no firm deck for a winch on which to wind the hawser, a substitute deck is provided, known as the headworks. It is a sturdy log raft, perhaps twelve feet square, with the winch mounted vertically amidships. Well-seasoned, buoyant logs are used for the raft, generally white pine or spruce.

The drum of the winch is the select portion of a hardwood tree trunk, around two feet in diameter and four feet or more in length. Metal hoops reinforce this drum, and a hole bored through its center lengthwise permits the drum to be slipped on a vertical steel axle which, in turn, is firmly fastened to the raft. Metal bearing plates at either end of the drum reduce wear and friction. A ratchet in the metal base plate can be used to hold or release tension on the hawser.

Four or six carefully designed notches are let into the drum at about chest or shoulder height from the floor of the raft, and equally spaced around the drum's perimeter, into which heavy wooden bars can be slipped, like the spokes of a wheel. Two men at each spoke provide power for turning the winch. The notches are designed to permit quick withdrawal of the bars — a very necessary safety feature. The inboard end of the long hawser is permanently attached near the bottom of the drum, with the hawser leading away from the raft through guides at the "bow."

All of the above is a very general description of the headworks, for I kept no personal record of the dimensions, nor have I run across such a description. It is a cumbersome looking craft, and the skill required in its construction is not readily apparent to the casual observer.

Our pulpwood boom is a huge affair, whose broad surface is a fixed sail that cannot be trimmed or adjusted in any way. A favorable wind will carry it smartly down the lake to its outlet, but an unfavorable wind will wash the boom ashore, where it will break up and scatter the pulpwood disastrously. This dictates that open water must be negotiated only in times of favorable winds or calm weather, and the boom must be brought to a safe anchorage before adverse winds become overpowering. Moving the boom, therefore, is a twenty-four-hour chore, sometimes with all hands idle and the boom safely moored, and again with crews spelling each other around the clock.

To start our boom on its journey, the headworks is towed out and secured close to what will be the leading edge of the boom. The headworks, therefore, becomes the prow of our log boom-ship. On some lakes a motorboat might carry the anchor and hawser out from the headworks and help in towing. But on our drive a bateau is used. It is a specially designed, heavy rowboat with considerable freeboard, rather broad of beam, and narrowing to a high-peaked and narrow-pointed bow and stern. In the hands of skilled men it can negotiate very turbulent stretches of quickwater with a heavy load.

The men in the bateau take aboard the anchor, attached to the lead end of the hawser, and row off in the line of travel with the hawser unwinding from the winch. When the full length of hawser is carried out, the anchor is dropped and the bateau returns to the headworks. Mooring lines, which have held the pulpwood boom to the shore temporarily, are cast off and the journey begins.

Either eight or twelve men, according to the number of spokes in the winch, insert their wooden bars into the notches of the drum, two men to each bar, and begin to "wind her down." Round and round, they push against the chest-high bars. It's a game of follow-the-leader, in circles. And don't forget to step high each time your monotonous path takes you over the hawser.

The bearing plates and axle are heavily greased, but there is nevertheless a concert of familiar creaks and groans as tension on the hawser increases, and the raft itself protests in every joint. Round and round you go, it seems endlessly and without result. But the boom does move ahead toward the anchor. With favorable winds the winch turns easily after overcoming the inertia of getting under way. The only effort required is to take up slack on the hawser. But even a slight head of quartering wind makes the men buckle down to their work. The battle between straining hawser and resisting boom, and the increasing load on the raft as the wet hawser comes aboard, pushes the headworks down. The men slosh around with the deck under water. Despite its size the hawser stretches like a rubber band until the point is reached where the anchor threatens to pull free, or until the pulpwood sticks at the rear of the boom begin to escape, either over or under the confining boom logs, or until the brute force of the men at the winch is matched by that of the wind. Then the boom comes to a halt or is driven back.

When such an impasse is reached, the men pull their bars from the drum, smartly and in unison, and the drum whirs in reverse until the strain on the hawser is relieved. All of the bars must come out together. (I recall one time when the men

at one bar were a mite late. Their bar whirled around, still in its notch, nearly decapitating some men on the raft, until centrifugal force threw it far out into the lake. It is a vivid recollection because I was one of those men.) By the time this impasse is reached, the smart boss will have his boom safely moored or anchored, preferably in the lee of a point of land.

When the boom has been moved so far from the landing that the logging camp can no longer be used, the first of the drive camps is set up. It will be moved along in harmony with the progress of the drive, all the way downriver to the receiving boom above the mill. Nicauous Lake and Passadumkeag Stream have been driven for many years, so the most favorable campsites are known, and there may be some crude "permanent" improvements at them.

The drive camp is a Spartan setup, because all of it must be moved frequently — first by bateau over quickwater at flood pitch and then, perhaps, by team as the drive moves out of the woods into civilized country. There is generally some tent shelter for supplies and a large wall tent or canvas lean-to for sleeping quarters.

Prodigious meals are cooked over open fires, with reflector ovens for baking, and every effort is made to supply the cooks with delicacies, even eggs, that are not found at logging camps. Generally there is a bean hole in which beans are baked in immense iron kettles — the best baked beans in the world. Each man is served at least four meals per day, no matter what his working hours may be. So the cooks, as well as the men, work in shifts.

The men sleep on the ground, with heavy spreads for bedding and some straw for mattresses. Clothes get soaked regularly with ice-cold water, at least to the waist, and overall in stormy weather. Men can dry out, to a degree, around a huge campfire. But throughout the drive they are apt to work in wet clothes and sleep in damp bedding. No wonder these rivermen develop rheumatic aches and pains and all the various respiratory ailments. A drive camp is no place for those who are disturbed by the sounds of incessant coughing and clearing of throats. Men of the crew are a sturdy lot, but at all times there are some with temporary ailments.

When the boom's progress is held up by adverse winds, the camp becomes a dreary place, crowded with impatient men who have little to do. But when the boom is moving, the place is alive with round-the-clock activity.

Let's assume we are beginning a day shift and are rowed out to the headworks. It may be in the middle of the lake or close to shore, depending upon the configuration of the shoreline in relation to a straight-line course from landing to the lake's outlet, or depending upon the need to keep to the lee shore when winds are unfavorable.

You replace one of the men at the winch bars and take up the treadmill task. The crew foreman, like the captain of a ship, stands watch to mark the boom's progress and to anticipate problems. He needs the sailor's canny instinct in measuring the direction and strength of prevailing winds and equal ability to foresee changes in their direction and force.

Around you go, monotonously and, it seems, endlessly until, at a signal, the ratchet is set to hold tension on the hawser while all hands take a breather. Eventually, when the boom is wound down close to the anchor, men in the bateau weigh the anchor and again carry it forward while the hawser unwinds from the winch. The new anchorage must be achieved promptly, because during the interval the boom is adrift and at the mercy of the winds, unless a temporary second anchor has been dropped at the headworks.

Even on bright, sunny days it is hard to acknowledge the signs of spring around you. The sun may be warm. Loons may call out and there may be the splash of fish nearby. Trees along shore may be tinged with green. But your thoughts are chained, like a slave, to the winch bar, the boom's slow progress, and the numbing cold of water that splashes on you. Breezes coming to you from across the lake are still chilled by the frigid water.

Having worked the day shift, you lie between blankets at night, surrounded by low-pitched sounds of the cooks' unceasing activities, the comings and goings of men on the night shift, and the snores, coughing, and heavy breathing of sleepers lying close together. You look out over the dark water to the glow of lanterns on the headworks. Waking from each

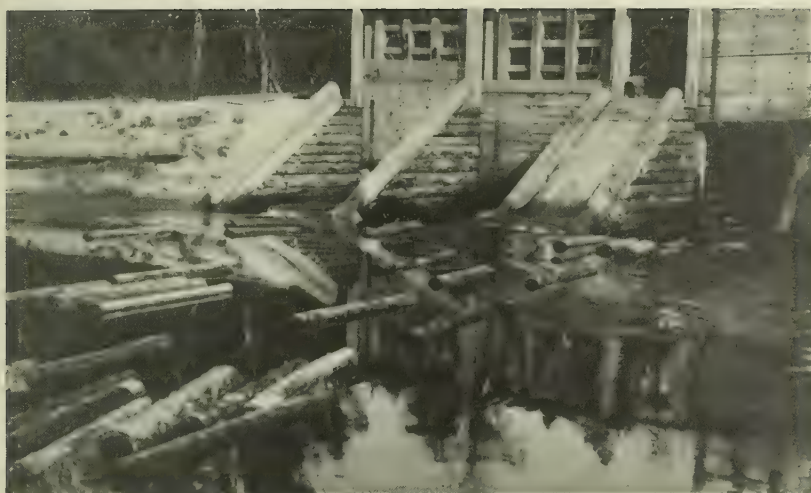
catnap, you mark the boom's slow progress by lining up its dim lights with some reference point on shore. When you hear the familiar sounds of winch and raft you know the boom is moving along. When the sounds cease, the silence wakens you, and tells you that adverse winds or some accident has halted the boom. Or perhaps the anchor is being carried out. Or it may be the comforting knowledge that the boom has finally reached the foot of the lake and is moored there, ready to discharge its cargo of pulpwood into the stream below.

Then you listen for the muffled sounds as men come ashore, beach their bateau, and gather around the drying fire, talking in low voices as they eat their supper (or is it breakfast, or lunch?) before hitting the sack.

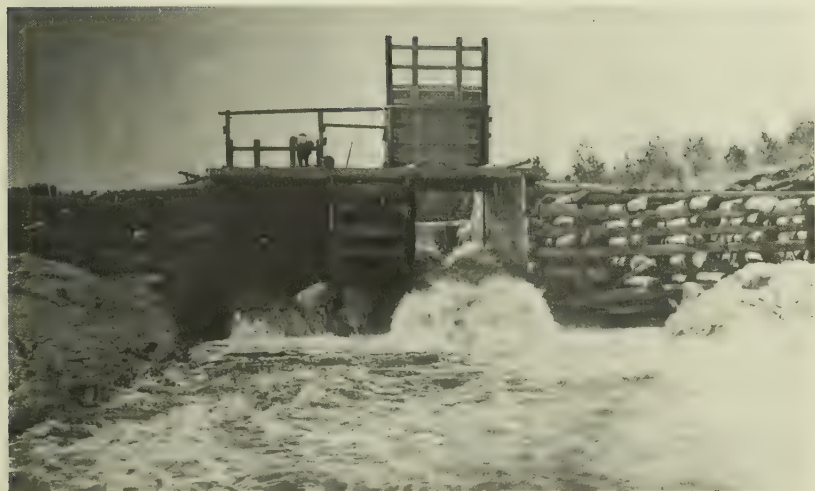
Many years ago an earth dam was built at the foot of Nicauous Lake, where it empties into a branch of Passadumkeag Stream, and the dam has been kept in good repair ever since. One of its functions is to impound floodwater in the lake for controlled release as needed to maintain the proper driving pitch in the stream below. Another function is to provide an efficient means of sluicing logs or pulpwood out of the lake into the stream.



PULPWOOD ABOVE NICATOUS LAKE DAM



NICATOUS LAKE DAM



TELOS LAKE DAM

For this dual purpose a heavy, timbered sluiceway replaces the earth fill midway along the length of the dam. It has a solid, timbered floor at the low-water level of the dam, and a timbered deck or bridge on a line with the crest of the dam. Flowage through the sluiceway is controlled by three lift gates. Each gate is made of heavy planks set loosely on edge in a frame, each plank on top of another, and with the frame held between vertical guides. With all planks in place, they form a barrier from floor to crest of the dam. Each gate can be raised and lowered, like a sash window, using long pry bars to do the lifting. With the gates down and all planks in place, the lake level is raised until water spills over the topmost planks. The water level can then be lowered by lifting a gate to let water escape below it or by removing the top planks.

Reaching out into the lake from the sluice is a string of boom logs, or two parallel strings bound closely together, to form a catwalk. It is secured in place at the dam, while the other end is moored ashore by a long hawser. The string can be swung in an arc across the lake's surface from the pivot point at the dam. This will help guide the pulpwood to the sluice when the boom is opened.

At the dam the confining chain of boom logs is opened at one point by slipping a chain from one of the logs. The boom is then moored ashore, one end to one wing of the dam, the other to the other wing. Pulpwood therefore cannot escape back into the lake, but it is free to pass into the sluiceway.

When all is ready, some top planks of a gate are removed, and the rush of water generates a current that draws the pulp sticks to and over the dam to begin their journey downstream. Men with pick poles stand along the catwalk above the dam to herd the sticks along. As more and more of the pulpwood is sluiced, the retaining boom is drawn tighter to crowd the remaining sticks to the outlet.

Below the dam the tempo and character of the drive changes abruptly. No longer is there the monotonous drudgery of winding down the boom, night and day. Everything comes alive. The bulk of the work is done during the long daylight hours. Most of the pulpwood sticks tumble along with the rushing torrent. Like a cattle drive, the main

herd of pulpwood must be kept moving along, but without stampeding, while stragglers and laggards are prodded along to keep up. Each stick of pulpwood now displays its own peculiarities. The peeled wood that was stripped of bark early in the previous summer had many summer days to season and dry out, so these sticks ride high on the torrent. The surfaces of peeled sticks are a bit slimy where water has softened the sap that had dried on them. Like greased pigs, they slither through and around obstacles. The unpeeled "rough wood" was cut later in the summer and did not dry out as thoroughly. Riding lower in the water, the rough surfaces of these sticks cause them to hang up easily against obstacles.

Suddenly the sights and sounds of spring are all around you. The roar of quickwater replaces the less intrusive sound of waves lapping on the lake shore. The pulpwood sticks tumble over each other and add to the confusion of sounds and movements. You brush against opening leaves and flowers along the stream bank. Birds and little animals have an urgency and purpose in their movements as they flutter and scurry around. After their wintery struggle merely to survive, they now have nests to build and families to rear.

In smooth stretches the water flows quietly but with great force, and a carpet of pulpwood rides on the surface. Bends in the stream create eddies which entice some sticks to stay behind, circling aimlessly. At other points the floodwaters rise above the stream banks, and overflow into swales and meadows. Advance crews have strung booms across these overflow points. But, somehow, some sticks get through and will be grounded when the flood subsides.

Again the stream narrows to create rapids. There are boulders in midstream where even these short pulpwood sticks may hang up, become cross-piled, and provide the makings of a pulpwood jam. Men are stationed at these strategic points with long pick poles to "tend out" on the drive and shove the laggards back into the mainstream.

After the last stick of pulpwood has been sluiced out of the lake, a crew follows downstream to "bring up the rear," seeking out all sticks that have hung up so that no wood is left behind. If the main body of the drive runs too freely, with too

much of the wood hanging up in eddies and flowage, the whole drive may string out along too great a length of the stream. Then a boom is strung across some stretch of quiet water ahead of the drive to hold it in check until the rear catches up. At the same time word goes back to the watchman at the dam to lower the gate and reduce the flow of water temporarily. Similarly, the head of the drive may be held up to await the arrival of another little drive coming out of a side stream. Or it may be held up to prevent it from overtaking and mixing with the drive of another operator downstream.

As the drive moves downstream, the camp moves with it. Like a small-time circus, the camp crew performs — strikes camp almost daily, sets up at a new location, and gives its next performance of at least four meals per day — without fail.

At all times, the progress of the drive must be geared to the water supply. All lakes and ponds of consequence in the entire Passadumkeag watershed have dams at their outlets to hold or release water, as necessary, to keep the stream at proper flood pitch. But if the drive's progress is too slow, the supply of spring floodwaters will be exhausted before the drive reaches its destination. Then great quantities of pulpwood may hang up high and dry as the water recedes, and the manual labor required to pick the rear becomes Herculean. And some quickwater stretches will degenerate into riffles that cannot float the wood. By contrast, an overabundance of floodwaters may overtax the impounding capacity of the lakes. Then the drive is in serious trouble, and desperate efforts are required to prevent it from running downstream out of control.

As the drive proceeds downstream toward civilization, little clearings appear where brave souls are wresting a bare-bones existence from the land. Later we come to more prosperous farms and to roads of a sort, which can be used to move camp by horse-drawn wagons or trucks. We come to a little collection of buildings, hardly enough to be called a hamlet. But there is a telephone and a tiny general store, and it is called Saponac. We buy some candy bars and rubbing lini-

ment and begin to accustom ourselves again to meeting and talking with "strangers" who are not members of our crew. Through them and their modern conveniences of telephone and newspapers, we begin to absorb news of the outside world.

We continue on to where the stream flows in and out of Saponac Lake, really an oversized pond. In all frankness I cannot recall whether it was negotiated with closed boom and headworks or whether the pond was so small and shallow that the flood current carried the drive along, from inlet to outlet, between boom logs strung along each side of the main channel.

By now the Passadumkeag is a considerable stream, broad and deep, that sweeps the drive along rapidly. Then the pace of the pulp sticks slackens, and they begin to crowd together. This tells us that the head of the drive has been held up near the town of Passadumkeag, where the stream empties into the Penobscot River.

When the rear of our drive has been brought up to this holding point and all stragglers have joined the main body of the drive, the restraining boom is opened and we move out into the river. Tremendous volumes of logs and pulpwood have been driven down the Penobscot River annually for almost a hundred years, with many operators using the river at the same time. A log-driving association was formed, therefore, to which all river users subscribe. It has overall authority for all drives down this portion of the river. It constructs and maintains a complicated array of river improvements. Heavy booms are strung across side channels, flowage meadows, and other impediments to keep the drives in mainstream. Heavy, rock-filled cribs appear frequently as anchor points for the diversion booms.

All of these river improvements and facilities direct the logs, inexorably, to log-sorting booms where, as in a railroad yard, logs of differing ownerships are shunted into separate holding booms. Drives of four-foot wood, like ours, are kept far enough apart on the river to avoid mixing, because sorting of mixed ownerships of this small wood would be well-nigh

an impossible task. Like the long logs, each pulpwood drive goes into its own holding boom. This, the penultimate stage of our long journey from woods to mill, is handled by our crew cooperating with association crews.

The Orono Pulp & Paper Company mill is downriver from the sorting booms, so our drive eventually continues down to another holding boom at the mill. Here the pulpwood sticks are floated to a conveyor chain, which carries them out of the water, up a long inclined chute, to be dumped in great storage piles, like huge haystacks. Another conveyor will take them from the pile into the mill, from which they will emerge as laps of pulp or as various grades of paper.

And so our drive has reached its destination, many days after it left the landing on Nicatous Lake.

* * * * *

Despite the use of present tense, this drive actually took place more than fifty years ago. The mill was closed some years later. It was a relatively small mill, using 25,000 cords of pulpwood annually. But at an average of eighty sticks per cord, the annual consumption was some two million sticks of pulpwood.

Thinking back on those two million sticks and considering them against the background of today's highly mechanized technology, my back aches to think how many times each of those two million sticks was picked up and moved by hand. From the ground where the tree was felled and cut into four-foot lengths, each stick was hand-loaded on a horse-drawn sledge and hauled to the edge of a hauling road, or it was tossed to the roadside from nearby trees. Here it was hand-piled into cordwood stacks. That winter, each stick was hand-lifted from the stack and loaded on a hauling sled, thrown off the sled at the landing, and sometimes restacked in high tiers. On the drive many sticks that had hung up had to be lifted and thrown back into the stream. At the mill they were taken out of the water and dumped into piles mechanically. But they were manhandled again to load them on conveyors leading to the mill.

Much of the mill's supply was driven or hauled to railheads and shipped from there to the mill by rail. This involved another task of hand-loading the boxcars, with wood piled in tiers to the ceiling, only to be unloaded by hand at the mill.

So, like the pulpwood camps of the 1920's, transporting pulpwood from woods to mill required vast expenditures of hard manual labor by men who were provided with what we would now consider primitive living conditions.

9

CANOES AND CAMPFIRES

*O ma ole canoe! w'at's matter wit' you,
an' w'y was you be so slow?*

William Henry Drummond

As you work your canoe, day after day, it seems to become almost a living thing. Its response to your guiding hand becomes quick and sure. You move easily together across the calm lakes and quietly if you feather the paddle. Keeping close to the shore, you can glide quite near to wildlife at the water's edge before the animals are disturbed. When the winds are strong you kneel in your canoe to become even more a part of it, anticipating its every movement, swaying in balance with it as it pitches and rolls through the rough water. In quickwater there is the excitement of ever-changing risks that you and your canoe must overcome together.

If your hand is skillful, your craft becomes both servant and companion. At day's end, as you carefully beach your canoe for the night, you may run your hand approvingly along its curving prow in appreciation of its performance. This relationship between a man and his canoe is something akin to that between an understanding man and his horse.

A canoe's character is not completely submissive and tractable, however. Like a high-spirited horse, it is quick to unseat a careless or foolhardy rider. Carelessness taught me

that lesson on the embarrassing evening at Birch Point Camp. Foolhardiness taught me the same lesson even earlier, in the spring of 1920.

Slim Perry and I had started downriver from Chamberlain Farm. At the farm we borrowed a decrepit little canoe to take us, via Telos Lake, to the foot of Webster Lake. From there we would continue on foot to Trout Brook Farm.

The canoe was logy and slow, making the twelve-mile paddle to Telos Dam something less than a pleasure jaunt. It was apparently pretty much agreed, among sensible people of the time, that the "cut" connecting Telos and Webster lakes was not a canoeing stream. So it was the practice to carry canoes and equipment around this quickwater.

Slim and I trudged down the carry trail with our packs and returned to the dam for the canoe. As we wearily approached it, our bemused minds suddenly came up with the bright idea that it would be much easier to ride the canoe downstream than to carry it over the trail. The sluice gates of the dam were raised at the time, letting the full force of the spring floodwaters roar down into Webster Lake. The watchman at the dam suggested, rather mildly, that it would be the part of wisdom to scout the stream first, but this was brushed aside as wasted effort.

Slim offered to man the stern paddle, because he was more experienced than I in running quickwater on a paddle. That didn't rate him high in experience, however, for I had never tried it, even once. We slid the canoe into the backwater below the dam, stepped aboard, and pushed out into the mainstream. Here we ran into trouble immediately. Instead of riding the torrent, our waterlogged little canoe plunged its bow deep below the crest of the very first wave, and buckets of water spilled into my lap. It was too late to retreat, for we were caught up by the current. Away we went, trying unsuccessfully to work in to the shore. Each wave brought more water inboard until we were racing downstream in a canoe submerged practically to the gunwale.

We didn't upset — we just sort of stepped out into the boiling mass of ice-cold water. At the next sharp bend in the

stream I made a grab for a small cedar that had washed partly into the stream. After a rib-bruising slide along it I finally held firm and crawled ashore. Slim was lucky, too, and came out a bit farther downstream, equally bruised and equally thankful. A tough scramble along the stream's edge, all the way to Webster Lake, gave us no sight of the canoe. So back we went to the dam and prevailed upon the watchman to drop the sluice gates and shut off the water. Then we started back along the strangely quiet stream until we found our canoe. It had come up against a little island of dri-ki in midstream, where it was sucked under and its keel broken as it wedged out of sight below water in the cross-pile of debris. There, but for good luck, we might have ended, too.

After reporting back to the dam and helping to raise the gates again we resumed our journey, this time walking along the rough shore of Webster Lake instead of riding on it. It was a tough way to be taught a needed lesson.

Canoeing is not always the poetry of motion and a pure delight, much as we would like to remember it that way. Often it is just plain hard work and the only way to get from here to there. There was the late fall season, for instance, when four of us were sent in to cruise timber on Lakeville Township, in lower Penobscot County. We started out bravely enough, with camp gear and a full-time cook we had picked up at one of the hiring halls. By train and auto we arrived one evening at a sporting camp on Lower Sysladobsis Lake (generally contracted to Dobsis and pronounced Döbsee). The next morning we rented two canoes, paddled a few miles down the lake to the stream coming out of Upper Dobsis, carried to the upper lake, and paddled to about the mid-point of the north shore, where we established camp.

One little hitch developed in the process. In the morning, before leaving the sporting camp, we found that our cook had brought along a bottle and had nursed it methodically all night. After a sobering-up breakfast of strong coffee, he revived enough to sort of flow down and into the middle of a canoe, where we had arranged a little nest for him between

rolls of bedding. When we put forth on the calm lake a bright and warming sun began to work on him. First he took pity on himself for signing up with us. He demanded, in vain, that we return him to the camp. Then he was overcome with fatigue. Each time his eyes closed he lunged forward and sideways, threatening to upset us, for we had only a few inches of freeboard in the heavily-laden canoe. I splashed water on him a couple of times, but this merely wet the cargo and raised his ire to the point that he made ready to clamber over the duffle to get at me. Finally I threatened to clobber him with the paddle if he didn't stop rocking the boat, and he subsided.

Where the stream comes in from the upper lake we stretched him out on the ground and packed one load over the carry. When we returned he was in a semi-happy mood which led to our search of his pack and confiscation of what little remained of his liquid comforter. Finally we got him and all supplies to the campsite and returned the bottle to him for tapering-off purposes. He served us some pretty terrible meals for a couple of days, until we surrendered and took him back to the sporting camp with an order on the downriver office for his unearned wages.

Most of the land we were to cruise was north of the lake, where we were camped, but there were several days of work to be done along the south shore. My partner and I took on the south-shore job and ran into problems regarding the daily round trips across the lake. In the first place my partner was a complete stranger to the ways of a canoe; so I had to work the stern paddle, with him doing his earnest best in the bow. This made the stern rise high in the water, because I weighed no more than 130 pounds while he, a one-time linesman on the University of Maine football squad, came in at something over 200. That was solved by the usual expedient of adding rock ballast to the stern.

The next hurdle was an old knee injury he had suffered which made it impossible for him to kneel in the bottom of the canoe, as one should in rough water. In fact, he had to sit at

odd angles on the bow seat to make room for his stiffened leg and had to change position suddenly whenever his leg began to cramp.

In the calm of each morning we made it across the lake without difficulty. Then the daytime wind would rise. By late afternoon, when we were ready for the return trip to camp, a northerly half-gale would be whipping whitecaps as it swept quartering across the lake into our faces. This gave us deep trouble in getting launched and clear of the rocky shore, particularly since my stiff-legged companion was none too agile. After the launch, by paddling frantically, we would gain a little and lose a little in the struggle to get further off shore and clear of the rocks. In mid-lake we could sort of ride out the heavier gusts and move ahead in the lulls until we reached the lee of the farther shore. There's no denying we were scared on those trips, and I should have known better than to make them. But after all, the freeze-up was approaching, and our supplies were running low. We couldn't afford to wait for calmer weather.

*Cold night weighs down the forest bough,
Strange shapes go flitting through the gloom.
But see — a spark, a flame, and now
The wilderness is home!*

Edwin L. Sabin

Nowadays, many campers do not build wood fires, either because fuel is lacking at overpopulated campsites, or regulations forbid them, or canned fuel is more convenient and time-saving. This is a pity — the experiences and values of camp life are brought to mind most vividly as you relax in the warmth and glow of a wood fire at the end of the day.

The love of campfires does not extend equally to all of them, however, for they are of many kinds. The most common are found in stylized fireplaces at public campgrounds and in their urbanized counterparts, charcoal grills in the back yard. The former are kindled with newspapers, nurtured on

cartons in which the lunch was transported, and brought to full glory with bits of dead wood scavenged from the premises or with wood cut to lengths and furnished by the camp management. You may even find yourself in undeclared competition for "best fire of the day" with the Daniel Boones at adjoining rows of identical fireplaces. I speak of these fires in jest, but they should never be derided. Millions of us build them each year, and the man-hours of enjoyment they provide are beyond counting.

There are the huge bonfires that are kindled at Scout camps and other gatherings. They lead to group singing and general camaraderie and form cherished memories of youngsters of all ages.

Then there is the lunch fire that is kindled as you pause briefly from your labors, only for the purpose of heating food and drink and providing warmth in winter or smoky protection from insects in summer. The objective here is a blaze that will perform efficiently and briefly. It is then quenched and abandoned with hardly a backward glance and with no more than passing appreciation for the service it has performed.

There may still be those in the Maine woods who cut a tea pole, and jab sticks, and a hook'n snibby when they build their luncheon fires. It was routine procedure for us to "boil tea" at lunch time. The tea pole, of course, was like a short fishing rod, with the butt stuck into the ground at an angle, and a rock or log at the correct point along its length to keep the free end at a proper height above the fire. A bailed teapot was suspended from the tea pole over the fire. Each man cut a jab stick, a small wand like those used at marshmallow roasts, to toast his biscuits and meat over the fire. The hook'n snibby was a pothook made from a forked switch. One branch of the fork was cut short, to form the hook, and the other was left long for a handle. Each lunch fire called for a hook'n snibby to lift the teapot from the fire.

In Fly Time the lunch fire might be converted into a smudge after the tea was boiled. We would stand around it as we ate, first seeking the smoke to be rid of flies and then gasp-



LUNCH TIME FOR EARL AND MIKE
Teapot suspended from tea pole

ing our way out for a breath of fresh air and to get the sting out of our eyes. The smudge provided intermittent relief, but no real comfort.

In Snow Time the lunch fire was on a grander scale. A fire laid directly on the snow would soon melt itself into a hole and sputter out in the resultant puddle. So we might use our snowshoes as shovels to dig down to the ground for a fireplace. An enlarged digging provided room around the fire in which to squat for both warmth and protection from the wind. With the fire placed close to a tree, but not so close as to burn the bark, the tree trunk acted as a crude chimney to draw some of the smoke out of the dugout. When the snow was too deep or we were pressed for time, we would lay down a platform of short lengths of larger limbs on top of the snow and build our fire on it.

In Snow Time it was often difficult to find water at the lunch hour. Small streams were either frozen solid or buried under deep snow. Ponds were also buried under snow and

ice. Open water was scarce, except in the fast-running larger streams. Then we would melt snow for water. This takes a little know-how if you want to avoid ending up with water that is thoroughly saturated with the taste of smoke. The teapot was crammed with snow to just below the brim and placed over the fire. As the snow melted down, more was added until there was enough water for the tea. If you tried to hurry the process by piling snow above the rim of the teapot, the snow would become thoroughly blackened, and the resulting water would be bitter and smoky-tasting. A couple of sticks laid across the brim of the pot kept smoke from swirling down into it, and the tea water was much better for this precaution.

Ordinarily I am a coffee man, and we generally had that for breakfast. But, somehow, good strong tea tasted better than coffee at lunch time, and when we returned to camp in the evening, numbed to the bone by sub-zero weather, hot tea seemed to warm us better than coffee.

In cold weather our lunches would be frozen stiff by the time we were ready to eat them. We seldom took time to thaw them completely on our jab sticks, so the result was a sort of baked-Alaska biscuit that stayed the pangs of hunger but was hardly a gourmet's delight.

Sometimes, in cold weather, we would come upon the hollow snag of an old pine tree at lunch time. We would chop a hole in the shell of it and build a fire inside. In no time the resinous snag would become a roaring chimney of flame, often so fierce that a separate fire to one side would be needed for the teapot. It was a warming and exciting spectacle, with clouds of cinder-laden black smoke pouring out of the top of the chimney. Such fires can burn or smoulder for days, as the fire works its way down into the heavier roots. For this reason we had to abandon the snag burnings rather early in the spring, to give time for the fires to burn out well ahead of the spring fire season.

One winter we were cruising timber around Nicatous Lake, in Hancock County. Many years earlier the area had been worked over for hemlock bark. The trees had been felled and stripped of their bark, which was stacked in cordwood

piles for drying. Then, I suppose, it was to be sled-hauled all the way to the tannery, for the bark could not be driven downstream like logs or pulpwood.

Apparently, something had happened to the operation. Perhaps the snow was so deep that many bark piles were buried and overlooked at hauling time. Or it may have been an open winter, with too little snow in the woods and too little ice on the ponds over which the sleds were to travel. In any event, there were piles of bark scattered all through the area, a monument to an unprofitable venture.

When hemlock bark burns, it produces high temperatures with relatively little smoke, and it was sometimes used in forges to bring soft iron to a welding heat. So these piles of abandoned bark provided ideal lunch fires on sub-zero days. With but little encouragement the whole pile would ignite. The dry bark had curled, leaving holes through the piles that acted as vents to draw flames and smoke through the piles to the lee side. The windward side then became a veritable wall, shoulder-high, of flaming heat. Very comforting to a frostbitten forester.

These bark piles were witness to the changing values of a tree species. In those earlier days only the bark of hemlock was used, at tanneries. The stripped logs were abandoned in the woods, for they weren't worth the cost of getting them to the sawmills. Then, as tanning methods developed, the bark market collapsed, and loggers by-passed hemlock entirely in their search for spruce and fir. Later, the mills developed methods for converting hemlock into paper pulp. The harvest of hemlock was resumed, but this time the bark was left in the woods and the peeled logs went to market.

We took all precautions to prevent the starting of forest fires. In the dead of winter no particular care was necessary, but at other times we would instinctively make sure that the lunch fire was dead out.

Maine has experienced devastating forest fires from early times to very recent years and will probably witness them again. In the twenties, the State had a fire protection organization which, I believe, was largely concerned with protection of

public forest lands and, perhaps, privately-owned timberlands within incorporated townships. Even the fundamentals of the state organization have escaped me, however, because our company had few if any arrangements with them for protection of the company lands.

The Orono Pulp & Paper Company, for which I worked during most of my time in Maine, owned some hundred thousand acres of timberland in its own name and had an undivided interest in an additional two hundred thousand acres. It had one portable fire pump, with hose and nozzle accessories, available for fire protection. The only other fire-fighting equipment was the axes, saws, and similar tools in regular use at the pulpwood camps. There was no presuppression planning or training of personnel in the specialized art of fighting forest fires. Nor, during the decade and more that I worked in Maine, did the company have any continuing need for such precautions. In all that time there was only one serious fire on or adjacent to the company-owned lands. In mid-summer a fire broke out in our pulpwood operations on the east shore of Nicatous Lake. It was the first experience with such a fire for the entire company personnel, from the president down through the woods manager, the forester, the walking boss, and the camp bosses to the assistant forester (namely me).

Looking back, after experiences with all-consuming conflagrations in the Northwest, I realize that our Nicatous fire was no more than a stubborn blaze that took a week to cover parts of a section of land. Of course, we had no bulldozers or other mechanized equipment, except the fire pump. So, with our inexperience, the fire was a potent enemy. It was a welcome sound, one night, to hear rain pouring down on the overturned bateau beneath which we were huddled near the fire line.

I am indebted to the Nicatous fire for one of those little incidents that become events of moment in a man's life. On a hot day shortly after the fire was controlled, I began a solo coverage of the burned area to assess damages. A hatful of dark cloud sent down a soft, misty, but drenching shower, and I sought shelter under a tree that still had some protective

green leaves in the upper branches. A few yards away from me the blackened hardwood slope leveled off into a damp swale bypassed by the fire, which thus became a green island of cedars and alders in the midst of desolation.

When the brief shower ended, a shaft of sunlight came through the passing cloud and formed a small spotlight of brightness at the edge of the greenery. The patch of earth responded to this extra warmth by sending up a veil of light mist, tinged with an almost rainbow quality of radiance.

There was an electric sense of anticipation, which was fulfilled as a little spotted fawn stepped daintily out of the background into the circle of light, paused briefly and then, all unaware of my nearness, trotted back into the dark alders and cedars. There seemed to be a Presence very close to me in that moment of unexpected beauty.

When establishing camp for a week or more, considerable attention is given to the campfire. You may build a fireplace of heavy logs or rocks. Forked stakes are driven into the ground at each end of the fireplace, with a pole between them on which to hang pothooks of varying lengths. Table space may be arranged close by, for the cook's convenience. It becomes a working fire which may, nevertheless, take on some virtues of the fires we like best to remember.

If you are staying but briefly at a campsite you are careful to provide a good fire, but without some refinements that are justified by a longer stay. A small backlog assures sufficient steady heat to cook your biscuits in the reflecting baker. A couple of tea poles will take care of a teapot and a stew kettle.

After supper, when the evening chores are finished, this best of all fires becomes your sylvan companion and confidant as you sit beside it to plan for the following day. Then, gradually, your tent, the forest, and all other things retreat into the darkness, so you and your fire can commune in private. Deliberately you hypnotize yourself as you watch the flames and embers and the curling smoke and charring fuel. Then your thoughts range far and wide — back into former days and far ahead into the unknown future.



OUR FIREPLACE ON ALLAGASH STREAM, TWP. 8 RANGE 15,
SUMMER — 1919

The iron pot was picked up at an old campsite.

You can see for a million miles deep down into the pictures forming in your fire. If you lift your eyes you can transport yourself, instantly, to the farthest stars, and beyond. You wonder whether the living things which surely must be on some of those stars have anything to equal the simple pleasures you are enjoying at the moment. Peace and contentment, hope for the future, and what the Germans call "Heimweh" for things past are all merged in your thoughts.

If you are fortunate there is another companion to share your companion fire with you. But he must be a very special companion, who talks well when the impulse to talk is present, and who understands the value of silence when silence itself is a form of communication.

You sit by your fire for a long time. Then you add a few sticks of new fuel so you can watch the flames a bit longer from the comfort of your blankets. And as you fall asleep you give thanks, perhaps subconsciously or unwittingly, to the Creator who has seen fit to make you an infinitesimal part of it all.

POSTSCRIPT

GRANDPA AND THE ENVIRONMENT

*Ah, how unjust to Nature and himself
Is thoughtless, thankless, inconsistent man.*

Edward Young (1683-1765)

Through nearly fifty years, from college graduation to retirement, I was actively involved in the management of forest lands — first on corporate-owned property in Maine and then on the multi-million acres of Indian-owned forests that are located throughout almost the length and breadth of this country. As a logical part of the work, I kept informed regarding management policies and practices on other forest land holdings. Because of this personal involvement, it is natural that I have developed some opinions regarding past management of natural resources in this country and prospects for the future.

There is much to admire in the past record. But man was fallible, and without the gift of true prophecy. So mistakes were made. Equally obvious, but often ignored, is the fact that man is still fallible and still without sure foresight. So he will continue to make mistakes in managing these resources, despite all good intentions.

In planning for the future, therefore, we should first look back, to understand how and why we arrived at our present contentious position regarding the use of our natural resources. Forestry provides a good case study.

When I began work, in 1917, only a handful of us technically-trained foresters were actually practicing that profession. The man on the street knew little about forest management and cared even less. Over the next five decades the forestry profession matured and gained a well-earned reputation for competence and integrity. As forestry grew in stature, it also grew in complexity. Conflicts of interest as to forest management objectives intensified. Pressure groups among the citizenry became more numerous, more vocal, and more influential, with each group clamoring for the type of management most favorable to its own selfish interests.

With the easy assurance that hindsight provides, many now claim that foresters were and are industry oriented, and with little interest in or knowledge of the needs and rights of the general public.

A similar pattern can be traced with respect to the management of all other natural resources; that is, initial public indifference changing to awakened interest, coupled with condemnation of management practices over the past years.

So in these days of sudden concern for the environment Grandpa has become a convenient whipping boy. He is denounced for slaughtering the bison, raping the forests, ravaging our mineral wealth, and turning the once verdant prairie into a dust bowl. He is damned for stealing land from the Indians and destroying their once-proud heritage. He stands accused as the architect of an Establishment that still despoils the environment and oppresses the little people.

In these circumstances I would like to raise a feeble voice in defense of poor old Grandpa, even though some may say I am a traitor to the cause of conservation.

Despite his manifold faults, which are freely acknowledged, I contend that Grandpa's intentions were reasonably honorable, and his motives sincere. Before passing judgment, therefore, we should ask what our lives would be like today if Grandpa had been more frugal in his use of the natural resources and more gentle in dealing with his fellow men.

Where, for example, would we graze the cattle that feed us today if the bison still roamed the land in their original

numbers? Where would we grow the crops that sustain us if the virgin sod had not been broken and converted into farm and range lands? What if some forests had not been despoiled and some mineral wealth ravaged, to meet the immediate needs of our burgeoning population?

And, disregarding for the moment the question of ethics, where would we be living today if the Indians had not surrendered their lands to our forefathers, however unjust the conditions of surrender may have been?

I suggest that if Grandpa had not committed these so-called crimes, against Nature and his fellow men, we might still be a struggling little nation, concentrated largely east of the formidable Appalachians.

It was Grandpa's buoyant optimism, sparked by visions of wealth through exploitation of the "inexhaustible" resources, that made this country so rich and strong. It was this vision of limitless resources that made Grandpa so confident of the future that he proclaimed to the world, on the pedestal of the Statue of Liberty:

. . . "Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tost to me,
I lift my lamp beside the golden door!"

Emma Lazarus

With these huddled masses, these tired, and these poor, Grandpa recklessly exploited our natural resources and settled the homeless immigrants on lands once held by the Indians. Recklessly and ruthlessly, Grandpa carved from out of this formerly wild and little-used land a strong and virile nation — a nation so strong and powerful that it became the savior of its allies in two world wars. We became so powerful so quickly only because Grandpa was prodigal in his use of the natural resources with which this land was blessed.

In Grandpa's day this was a wild and untamed country, a land of far horizons and bountiful resources. It took a firm hand, coupled with stern determination, to tame the land and make it livable for "civilized" men. Grandpa, and the men of

his time, were therefore a ruthless breed, spurred to great deeds by visions of great personal gain. Some of them succeeded and became rich beyond the dreams of avarice. Others fell by the way and were trampled underfoot. But, as a whole, our nation waxed strong and gave to its average citizen a sense of security and well-being that became the envy of other men throughout the world.

The violence that Grandpa did to his environment and to his less fortunate neighbors may, therefore, be partially condoned as an incident necessary to the taming of a wilderness.

Grandpa mellowed a bit in his later years, after he had amassed wealth sufficient to make the future secure for himself and his progeny. About a hundred years ago he began to look back upon the consequences of his labors. He found that the natural resources were not inexhaustible, after all. So he began to cry "famine," much as we do today.

These prickings of Grandpa's conscience spurred him to some corrective actions. He organized associations to express his concern and to press for remedial action. He enacted laws to protect the dwindling supplies of timber and minerals, to conserve the land and water, to establish National Parks, and to improve the lot of the underprivileged. He saw to it that the bison were preserved in museum-sized herds, which is about all we can maintain on a reasonable allotment of land to their needs. He made the plains productive again, in some measure, but with food crops replacing native grasses on much of the land. He acknowledged the wrongs suffered by the Indians and opened the courts to them for redress of their wrongs.¹

These feeble beginnings were evidence of Grandpa's awakening to the probable consequences of continued unrestricted exploitation of natural and human resources. Of course, his efforts were but partially successful, for he could

¹Originally, the Indians could bring claims against the United States only in the U. S. Court of Claims, and then only with the specific permission of Congress. In 1946, the Indian Claims Commission was created (Pub. Law 79-726), where all but a narrow class of claims are now adjudicated. As of June 30, 1973, this Commission had approved 250 claims, the net final awards being more than \$537 million. There were then 221 claims still pending.

not completely forget the harsh conditions under which he had struggled to survive; so he still held to the belief that the profit motive is a morally-acceptable precept and that the man who works hard and succeeds is entitled to a greater share of worldly goods than his less fortunate neighbor. Under this philosophy he created the Establishment, wherein success breeds success and wealth tends to concentrate.

Now we of the living generations are heirs to Grandpa's estate. We find that he left some fearful debts of ravaged resources and broken spirits to be repaid. We also find, however, that he bequeathed to the average citizen of today a degree of affluence and leisure that is still denied to most people of other countries. From the security of this inherited affluence we now have time to indulge in the luxury of remorse. We can, and should, give productive thought to repaying Grandpa's debts; to healing the wounds of abused nature and to improving the lot of the less fortunate.

There is some question, however, whether we are in a mood to accept the challenge — whether we also inherited enough of Grandpa's courage and self-discipline to guide us in paying off his debts and in overcoming our own transgressions. For the truth is that our present-day standards of living are geared to a thoughtless waste of Nature's bounty that even Grandpa would have called shameful. He would be flabbergasted by the tremendous volume of natural resource products that flows into the average household today, and he would be outraged by the speed with which these products are discarded, long before their useful lives are ended.

"Waste not, want not" was a maxim that guided Grandpa's private life. He built things to endure, used them until they wore out, and then salvaged whatever was reusable. Today our maxim is "Convenience, style, and obsolescence, regardless of cost."

Grandpa used to say, with pride, that his buggy was made to last, and it would be a long day before he would have to replace it. The engine for this buggy was faithful old Dobbin, and the fuels Dobbin consumed were the renewable resources of hay and grain. The exhaust from this living engine

was returned to the earth as useful fertilizer or wafted into the air as harmless carbon dioxide, with a small mix of more pungent gases. Dobbin served faithfully and long; and his demise placed no lasting strain on the environment, no matter whether he was interred entire or after passing through the leather and glue factories.

The buggy and Dobbin have been replaced by the automobile, conceived in the non-renewable resources of our earth, born a weakling of scant life expectancy, and condemned to an early and unsightly grave. During its short existence, this mechanical marvel feeds upon non-renewable resources of our planet and pours out noxious wastes to pollute the air.

Our household appliances, like our autos, are designed for obsolescence. New models each year encourage discarding of the "old" regardless of their remaining usefulness.

When Grandpa thirsted for a mild stimulant he tapped the cider barrel, or drank home-made lemonade or root beer, or took his lard pail, reserved for the purpose, to the local saloon for a bucket of suds. The slaking of Grandpa's thirst did not culminate in mountainous heaps of bottles and cans.

Grandpa's newspaper, of a dozen pages or so, and the brown paper in which store-bought goods were sometimes delivered, were carefully saved for reuse as wrapping paper. Grandpa's wife went shopping with a market basket and brought home many of her purchases unwrapped. She saved string, and string balls were common in kitchens and woodsheds.

Today, we are overwhelmed by the sheer bulk of paper and other natural resource derivatives that finds its way into our homes. These gifts from Nature are served up to us as labor-saving "disposables." Disposable bottles, cans, drinking cups, facial tissues, bedding, and so on, *ad infinitum* — even to disposable clothing and umbrellas.

All of this drain upon our natural resources flows through our hands and quickly on to the growing mountains of debris that befoul the nest in which we live. Much of this debris becomes permanent, non-degradable waste.

Now, in reaching for the stars, we are depositing space-age garbage that may easily become a factor to be reckoned with by our children as they plan their space flights of the future.

Man for man, therefore, we make wasteful use of our natural resources, defile the air we breathe, pollute the water we drink, and desecrate the landscape to a degree unheard of in Grandpa's time. And, since there are so many more of us on earth today, the unfortunate environmental consequences may be approaching the point of disaster.

Yes, Grandpa had his faults, but so do we. Despite his faults, Grandpa bequeathed to us great wealth, technical know-how, health, and a standard of living far better than he was able to enjoy himself. The question now is, how wisely will we use our inheritance?

Few people, indeed, would advocate a return to Grandpa's life-style. Solutions will be found in the combined sober judgment of knowledgeable men in many fields of endeavor and over several generations, as well as in a return to Grandpa's maxim of "Waste not, want not." Disaster may follow, instead of salvation, if we act upon the fervor of hysterical repentance and the solemn pronouncements of pseudo-scientists.

* * * * *

There are trends in human behavior today that run counter to some fundamental and unchangeable laws of nature. These trends are widely recognized and discussed, but most often without reference to the natural laws that are being violated.

Among them is the law concerning survival of the fittest. The weak die young, the strong survive to reproduce their kind, and even the strong continue to live only until the frailties of disease, accident, or old age come upon them. There is the law of evolution which says, in part, that if environmental

conditions change, any form of life must make offsetting changes within itself if it is to survive. And there is the law, closely related to these two, which provides that when any form of life increases disproportionately with other life forms, its numbers are apt to be reduced again, by pestilence, starvation, predation, or other phenomena.

Because Man (a renewable resource) is violating these laws he is fast becoming one of the most endangered species on earth. This fact, belatedly, is now widely recognized.

We make great efforts to reduce infant mortality, to eliminate starvation and pestilence, and to prolong the life span. We try to make everyone equally fit, physically and mentally, and thus attempt to evade the law concerning survival of the fittest. As a result, we are caught up in a population explosion that is now recognized as spelling potential disaster. For, if our numbers increase disproportionately, it seems inevitable that some natural phenomenon, or war, will correct the situation.

Of all forms of life on earth, Man seems most intent upon changing (spoiling) the environment in which he lives. We pour noxious gases into the air and foreign matter into the soil and water, until they become poisonous to us. We recognize the danger, but we are reluctant to correct the evil. And I have not heard it suggested that evolutionary changes are taking place in our makeup that will permit our children to live in this changed (polluted) climate.

We are changing our environment by drawing ever closer together in crowded urban areas, where we are brought in ever-closer contact with an ever-increasing number of our neighbors. But are we going through sufficiently rapid evolutionary changes, or mental adjustments, so that our children will know how to live with their neighbors, to respect their neighbors' rights, and to thrive in such a crowded environment?

To the contrary, it seems fashionable today to insist upon the rights of the individual, even when they violate the rights of the community as a whole.

I am disturbed by these trends, which are now widely recognized. Fortunately, however, as one of the older generation I also have faith in Man's basic common sense. Life in the future will not be like it is today and probably not to my present tastes. But I believe the accepted life-style of the future will conform to the fundamental laws of nature and will also preserve the dignity of mankind.

In another related matter, we spend much time and money in attempting to save endangered species of animal and plant life from extinction. The attempts are commendable, by any reasonable standard, when their aim is to prevent wanton destruction. Few will contend that we should stand idly by while the leopard and other forms of wildlife are hunted down and exterminated, merely to indulge man's perverted killer instinct or to satisfy the whims of fashion.

But, considering man's selfish urge to perpetuate himself, how important to our existence or to the satisfaction of our souls are the Indiana bat, the crested honeycreeper, the Ou, the blunt-nosed lizard, the Inyo County toad, the humpback chub, the Tennessee snail darter, and many more on the Federal Government's long and growing official list of species which, the Government says, should be rescued from the extinction that now threatens them? We don't know the real, truly-objective answer to that question. For the moment, therefore, our efforts to save all these endangered species may be justified.

At the same time, we should recognize that most of these wildlife species are threatened with extinction, just as Man himself is threatened, because they are not adapting to the changing environment forced upon them.

If Man awakens in time, and it seems reasonable to believe that he will, he will cleanse the environment so that he can survive. But it may not be an environment that some others of the endangered species can tolerate.

That will be the point where survival of the fittest (or most powerful) may dictate that the nonconformers must perish. In these circumstances there should be no great con-

cern at the disappearance of the nonconformers. Our children will be satisfied to find them only as museum specimens, alongside the passenger pigeon, the dodo, and the dinosaur.

Species that can adapt to changing conditions do not seem to be threatened with extinction. The rat, the cockroach, and the bedbug, for example, may be around to plague future generations for a long time to come. And, perhaps, the black fly, the punkey, and the porkie, too.



THE AUTHOR WITH PACK BASKET
TOPPED BY A SPREAD



HENRY LEARNING TO POLE A CANOE



A GUIDE POLES THE CANOE THROUGH
A DAM WHILE HIS "PAYING GUEST" WALKS.

WILDLIFE AT CHAMBERLAIN FARM



CAMPFIRES REKINDLED

A Forester recalls life in the Maine Woods

In *Campfires Rekindled*, George Kephart describes with clarity and humor the many facets of life in backcountry Maine as experienced by him as a young forester at a time when tree harvesting called for hard, back-breaking labor from stump to mill. We see the rugged individuals who peopled those woods; the painstaking work involved in surveying and estimating yields of timberland; the miseries of bugs, of heat, and of cold; the harsh, primitive living conditions of pulpwood camps; the danger and drudgery of a pulpwood drive; the hazards of canoeing with a stiff-legged, 200-pound ex-linesman; the questionable delights of lunching on sandwiches that froze stiff in winter and, partially thawed over a campfire, became a "sort of baked-Alaska biscuit." Around it all, Mr. Kephart paints a sensitive picture of the beauties of nature and the sights and sounds of the changing seasons.

THE AUTHOR of *Campfires Rekindled* comes by his love of the outdoors naturally through his father, Horace Kephart. One of his father's many books, *Camping and Woodcraft*, published in 1913, immediately became a classic and an enduring reference in its field. GEORGE KEPHART graduated from the School of Forestry at Cornell University in 1917, when there was but a handful of technically-trained foresters in this country. He served with a logging and sawmill regiment in France during the First World War, after which he was employed as a forester by paper companies in Maine for eleven years. Later he was with the Branch of Forestry of the U.S. Bureau of Indian Affairs for thirty years, retiring in 1964 as Chief of that Branch. He received the Interior Department's Distinguished Service Award.

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